



YALE MEDICAL LIBRARY

HISTORICAL LIBRARY

The Bequest of CLEMENTS COLLARD FRY

EX LIBRIS

CLEMENTS C. FRY, M. D.

HP Burpitt
Cane Hill Asylum

LUNATIC ASYLUMS:
THEIR ORGANISATION AND MANAGEMENT.

STANDARD WORKS

ON THE

BRAIN, INSANITY, AND LEGAL MEDICINE.

THE BRAIN AND SPINAL CORD: The Structure and Functions of.
By VICTOR HORSLEY, F.R.S., Prof. of Pathology, University College.
10s. 6d.

"We HEARTILY COMMEND the book to all readers and to ALL CLASSES OF STUDENTS ALIKE, as being almost the only lucid account extant, embodying the LATEST RESEARCHES and their conclusions."—*British Medical Journal*.

THE CENTRAL NERVOUS ORGANS IN HEALTH AND DISEASE.

By Prof. OBERSTEINER. Translated, with Additions, by ALEX. HILL, M.A., M.D., Master of Downing College, Cambridge. 25s.

"Dr. Hill has enriched the work by many Notes of his own. . . . Dr. Obersteiner's work is admirable. . . . INVALUABLE AS A TEXT-BOOK."—*British Medical Journal*.

MENTAL DISEASES: With Special Reference to the Pathological Aspects of Insanity. By W. BEVAN LEWIS, L.R.C.P., M.R.C.S., Medical Director of the West Riding Asylum, Wakefield. 28s.

"Without doubt, the BEST WORK in English of its kind."—*Journal of Mental Science*.

"This ADMIRABLE TEXT-BOOK places the study of Mental Diseases on a SOLID BASIS. To the student the work is INDISPENSABLE."—*Practitioner*.

"A SPLENDID ADDITION to the literature of mental diseases. . . . AS A STANDARD WORK on the pathology of mental diseases this work should occupy a prominent place in the library of every alienist physician."—*Dublin Medical Journal*.

PERIPHERAL NEURITIS. By Dr. JAMES ROSS and JUDSON BURY, M.D., Senior Assistant-Physician, Manchester Royal Infirmary. 21s.

"Will for many years remain the AUTHORITATIVE TEXT-BOOK on Peripheral Neuritis."—*British Medical Journal*.

FORENSIC MEDICINE AND TOXICOLOGY. By J. DIXON MANN, M.D., F.R.C.P., Prof. of Medical Jurisprudence and Toxicology in Owens College, Manchester; Examiner in Forensic Medicine in the University of London, and in the Victoria University; Physician to the Salford Royal Hospital. Part I. FORENSIC MEDICINE. Part II. INSANITY IN ITS MEDICO-LEGAL BEARINGS. Part III. TOXICOLOGY. 21s.

"By far the MOST RELIABLE, MOST SCIENTIFIC, and MOST MODERN book on Medical Jurisprudence with which we are acquainted. We recommend it as the BEST BOOK extant."—*Dublin Medical Journal*.

LONDON: CHARLES GRIFFIN & CO., LTD., EXETER ST., STRAND.

LUNATIC ASYLUMS

THEIR ORGANISATION AND MANAGEMENT

BY

CHARLES MERCIER, M.B.

LATE SENIOR ASSISTANT-MEDICAL OFFICER AT LEAVESDEN ASYLUM,
AND AT THE CITY OF LONDON ASYLUM.

AUTHOR OF

“THE NERVOUS SYSTEM AND THE MIND,” “SANITY AND INSANITY,”
“THE ATTENDANT’S COMPANION,” ETC. ETC.

LONDON :
CHARLES GRIFFIN AND COMPANY, LIMITED,
EXETER STREET, STRAND.

1894.

[*All rights reserved.*]



RC439
894M

TO

THOMAS CLIFFORD ALLBUTT,

M.A., M.D., LL.D., F.R.S., &c.,

REGIUS-PROFESSOR OF PHYSIC IN THE UNIVERSITY OF CAMBRIDGE,
AND LATELY A COMMISSIONER IN LUNACY,

This Book is Dedicated as a small Acknowledgment;

OF THE ENCOURAGEMENT THAT HE HAS GIVEN TO
SCIENTIFIC WORK IN LUNATIC ASYLUMS ;

OF THE EFFORTS THAT HE HAS MADE TO SECURE MORE INDIVIDUALITY
IN THE TREATMENT OF THE INSANE ;

AND OF MUCH PERSONAL KINDNESS RECEIVED AT HIS HANDS

BY THE AUTHOR.

PREFACE

THERE are few departments of man's labour more completely specialised and more different from the rest than that which deals with the management of Lunatic Asylums. It is therefore somewhat remarkable that no system of instructions on this matter has hitherto been published, and that it has been left for the writer of this volume to be the first to treat the subject systematically.

That the practice of different individuals in this, or in any other department of labour should be reduced to uniformity is eminently undesirable, and to advocate uniformity of practice is no part of the object of this book; but it is eminently desirable that there should be agreement as to main principles; that the objects to be striven for should be clearly recognised; that various ways of attaining them should be discussed; that those already found successful should be stated; that improved methods should be suggested; and that the isolated and disconnected teachings of experience should be brought together, combined, systematised, and made readily available to those in search of information.

The whole tendency of the modern methods of management of the insane has been to approximate their mode of life as far as possible to that of the normal man. The process which began with knocking off the fetters and chains from the limbs of the lunatic has been continued and advanced by the successive removal of more and more restrictions, until he has been at length placed in a position of material comfort. But the process admits of being carried further, and neither the ambition of the alienist nor the conscience of the public will rest until the principle is recognised and carried into practice, that *no restriction is justifiable that is not required by the circumstances of the individual case.*

To lodge the insane in a palatial building, to keep them warm and clean, well clothed, well fed, occupied and amused, all this is most excellent and admirable. Contrasted with the ancient treatment by whips and fetters it seems perfect. But "nothing is done while aught remains to do," and the provision and the

amplitude of these material comforts must not blind us to the fact that in spite of them a large proportion of our patients are wretched. They are wretched because they are deprived of that most precious of all possessions—their liberty. That they are unfit to have complete liberty is manifest from the fact that the legal formalities necessary for their detention in an asylum have been complied with; but it by no means follows that they all, at all times, need the severe restriction which is the common rule in all asylums; and the direction in which improvement in the management of the insane will in the future be effected, will be in the more careful study and attention given to individual cases, and the greater elasticity introduced into the system of control. The times and seasons when greater liberty can be given will be watched for and taken advantage of, and the times when restrictions must be reimposed will be recognised. All the arrangements of the asylum will be made with special reference to the individuality of the patients, and will be rendered modifiable and adaptable to suit their individual needs. Management of patients by the gross will give way to management of the individual, and the object of the management will be to approximate the life of the insane to the life of the sane, as far as the approximation is possible. This is the direction in which the management of the insane is tending, and it is in recognition of this tendency, and to help it forward, that this book has been written.

That there is much here set forth that will be derided by the present managers of asylums as impracticable, the author does not doubt; but he has faith in the efficacy of the erection of an ideal as an object to be striven for, not doubting that, even if it be not attained, much advantage will result from every exertion towards it, however partially successful.

It is presumed throughout the book that the reader is familiar with the principles of sanitary science, and with the modern appliances necessary to carry those principles into effect. All that is here described is the *modification* of these appliances which is rendered necessary in lunatic asylums by the peculiarities of their inmates. Similarly with respect to other matters. General principles are supposed to be known, and the special applications only of these principles that are required in asylums are here described.

C. M.

GENERAL CONTENTS

PART I.—HOUSING.

CHAPTER I.

GENERAL PRINCIPLES.

	PAGE		PAGE
Sanitary Conditions	2	Size	4
Supervision	2	Cost	5
Treatment and Grouping	2	Equipment	5
Precautions	4	Accessibility	5

CHAPTER II.

GENERAL ARRANGEMENTS.

General Construction	7	Hot Coils outside the Ward	14
The Walls	8	The Fireplaces	15
The Floors	9	Fire-guards	16
The Windows	9	Lighting	16
Blinds	11	Gas Meters	17
The Locks	12	Water	17
Heating	13	The Softening of Water	18
Open Fires	13	Water Meters	20
Hot Coils in the Wards	14		

CHAPTER III.

WARDS AND WARD OFFICES.

A. The Day Rooms	20	The Piano	24
Furniture	21	The Decorations	24
The Floor Covering	21	The Flowers and Plants	25
Curtains	21	The Medicine and other Cup-boards	25
Tables	22	B. Dormitories	25
Seats	22	Beds	26
Screens	23	Woven Wire Mattresses	26
The Bookcase	24	Bed Feet	27
The Newspaper Stand	24	Special Forms of Bedstead	27
The Letter-Box	24		

	PAGE		PAGE
Mattresses . . .	28	Urinals . . .	37
Pillows . . .	28	Water-Closets . . .	37
Blankets . . .	29	Position . . .	37
Quilts . . .	29	Floor and Walls . . .	38
Chamber Utensils . . .	29	Furnishings . . .	38
Mirrors . . .	29	Water Waste Preventers . . .	40
Brushes and Combs . . .	29	Lavatories . . .	41
Lockers . . .	30	Basins . . .	41
Screens . . .	30	Towels . . .	42
Supervision Dormitories . . .	30	Sculleries . . .	42
Single Rooms . . .	30	Slop and Brush Closets . . .	42
Shutters . . .	31	Boot Rooms . . .	43
Ventilation and Lighting . . .	32	Soiled Linen Rooms or Closets . . .	43
Padded Rooms . . .	34	Coal Stores . . .	43
Bath-Rooms and Baths . . .	34	Ward Stores . . .	44

CHAPTER IV.

THE DINING AND RECREATION HALLS, CHAPEL, &c.

Recreation Hall . . .	45	The Chapel . . .	47
Heating . . .	46	Receiving Room . . .	47
Ventilation . . .	46	Visiting Room . . .	48

CHAPTER V.

COMMUNICATION.

Passages . . .	48	Staircases . . .	49
----------------	----	------------------	----

CHAPTER VI.

ADMINISTRATIVE PORTION.

The Kitchen . . .	49	Workshops . . .	53
The Scullery . . .	50	Offices . . .	53
The Laundry . . .	51	Superintendent's . . .	53
Wash House . . .	51	Assistant Medical Officer's . . .	54
Drying Room . . .	52	Other Officers' . . .	54
Ironing Room . . .	52	Library . . .	54
Foul Laundry . . .	52	Dispensary . . .	55
Boiler House . . .	52	Mortuary . . .	55
Stores . . .	52	Photographic Studio . . .	55

CHAPTER VII.

ACCOMMODATION FOR THE STAFF.

For the Medical Superintendent . . .	56	For Assistant Medical Officers . . .	57
For Attendants . . .	56		

CHAPTER VIII.

AIRING COURTS.

	PAGE		PAGE
Plants	57	Seats	59
Flower Beds	59	Birds and Games	60
Paths	59		

PART II.—FOOD AND CLOTHING.

CHAPTER IX.

FOOD.

Character of Food	61	Dietaries	65
Beverages	64		

CHAPTER X.

FOOD TESTING.

Meat	66	Cocoa	69
Salt Meat	67	Vinegar	69
Flour	67	Pepper	69
Bread	67	Mustard	69
Butter	68	Salt	69
Milk	68	Beer	69
Cheese	68	Tinned Provisions	69
Sugar	68	Rice	69
Tea	68	Peas and Beans	69
Coffee	68	Potatoes	69

CHAPTER XI.

FOOD—STORING AND KEEPING.

Meat	69	Milk	71
Tea	70	Butter	71
Coffee	71	Cheese	72
Cocoa, Mustard, Pepper, and Spices .	71	Potatoes	72
Tinned Goods	71		

CHAPTER XII.

SERVING.

	PAGE		PAGE
Mode of serving	73	Extra Diets	75
Table furniture	74		

CHAPTER XIII.

CLOTHING.

Women's clothing	78	Men's clothing	82
Dresses	78	Trousers	82
Petticoats	79	Coats	82
Stays	79	Waistcoats	82
Undermost Garment	79	Shirts and Undershirts	82
Stockings	80	Drawers	82
Boots	80	Neckties	83
Hats and Bonnets	80	Boots	83
Shawls	81	Overcoats	83
		Hats and Caps	83

PART III.—OCCUPATION AND AMUSEMENT.

CHAPTER XIV.

OCCUPATION.

Inducement to Work	85	From Relaxation of Supervision	99
Difficulty from Want of Intelligence	94	To Security	99
Dangers	95	To Health	99
From Use of Tools	95	From Mingling of the Sexes	99

CHAPTER XV.

AMUSEMENTS.

Recreations in the Wards	100	Golf	109
Recreations in the Airing Courts	101	Cricket	109
Quoits	102	Football	110
Bowls	103	Grounds	110
Lawn-Tennis	104	Other Open-Air Amusements	112
Skittles	106	Races, &c.. . .	113
Badminton	106	Recreations in the Recreation Hall	114
Rackets	107	Dances	114
Fives	108	Theatricals	116
Croquet	109	Concerts	118

PART IV.—DETENTION AND CARE.

CHAPTER XVI.

DETENTION.

	PAGE		PAGE
Meaning of Term	120	Limitation of Restraint	121

CHAPTER XVII.

CARE.

Suicide	124	Precautions	129
Suicidal Tendency in the First Degree	125	Razors	129
Suicides in the Second Degree	125	Knives and Scissors	130
Suicides in the Third Degree	126	Broken Glass and Crockery	131
Treatment of the First Degree	126	Home-Made Knives	131
Treatment of the Third Degree	128	Points of Suspension	131
Supervision	128	Means of Suspension	132
		Fire	132
		Water	133

CHAPTER XVIII.

VIOLENCE.

Provocations and Inducements—		Forewarnings of Violence	138
Aggressive Restraint	133	Mode of Assault	138
Closeness of Aggregation	135	Assaults with Weapons	138
Insane Peculiarities	135	Precautions as to Weapons	138
Treatment of Violent Patients	136	Management of Patients when	
Dispersion	136	Violent	140
Removal of Causes	137	Pretended Violence	142
Change of Surroundings	137		

CHAPTER XIX.

ACCIDENT.

Causes of Accidents	143	Precautions	151
Falls—Epileptic Fits	143	Inhalation of Food into the	
Warnings of Fits	143	Windpipe	152
Amplitude of Warning	144	Epileptics at Night	153
Direction of Fall	144	Scalding	154
Labour of Epileptics	145	Fire	155
Various Precautions for Epileptics	145	Precautions in Construction	155
Falls from Defective Footgear	146	Precautions in Management	156
Falls from Feebleness	147	Provision for the Safety of	
Falls from Jostling	147	Patients	158
Falls from Obstacles	148	Locks of Single Rooms	159
Falls from Defects in Flooring	148	Removal of Patients should be	
Suffocation	151	Practised	159
Impaction of Food in the Throat	151	Fire-Extinguishing Apparatus	160

CHAPTER XX.

CLEANLINESS.

	PAGE		PAGE
Bathing	163	Treatment	166
Dirty Habits	165	Neatness of Apparel	169
Causes	165		

PART V.—THE STAFF.

CHAPTER XXI.

THE STAFF OF ASYLUMS.

Responsibility	172	Who should Punish	178
Treatment according to Deserts	174	Reward and Punishment both necessary	178
Awards to Merit	174	Supervision	179
Awards to Faulty Conduct	175	Inspection	179
Amount of Punishment	176	Surprise Visits	179
Punishment should be Prompt	177	Reports	180
Punishment should fit the Crime	177		

CHAPTER XXII.

THE CHAPLAIN.

The Library	183	Back wholly gone	186
Repairing Books	185	Covers Torn	187
Torn Pages	185	Re-sewing	187
Loose Pages	185	Other Duties	191
Back Half off	186		

CHAPTER XXIII.

THE SUPERINTENDENT.

Supremacy	192	Duties	198
Character	196	Medical Duties	202

CHAPTER XXIV.

STATUTORY DUTIES

Duties attending the Reception of		Reception on Judicial Order	
Patients	211	on Petition	211
Original Reception	211	The Order	212
Private Patient	211	The Certificates	214

	PAGE		PAGE
Urgency Order . . .	215	In any case of Discharge of a	
Summary Reception Orders	216	Patient	232
Order by Committee . .	217	Removal of Patients from In-	
Pauper Patients . . .	218	stitutions	232
Criminal Lunatics . .	219	Private Patients	232
Admission on Removal	219	Pauper Patients . . .	232
Private Patients	220	Criminal Lunatics . . .	233
Pauper Patients . . .	220	Duties attending the Death of a	
Criminal Lunatic . . .	222	Patient	234
Reports and Proceedings on and		Duties attending the Escape and	
after Reception	222	Recapture of Patients . .	235
Duties necessary for the Retention		Duties attending the Use of Me-	
of Patients	225	chanical Restraint . .	237
Continuation Orders . .	225	Notices and Reports . . .	238
Duties incident on the Recovery		Notices, &c., to be Posted in	
of Patients	228	Institutions	239
Duties attending the Discharge		Correspondence of Patients .	239
and Removal of Patients		Visits to Patients	240
from Institutions . . .	229	Consent of Authorities in Certain	
Discharge	229	Cases	241
Private Patients	229	Duty of Keeping Books . .	242
Pauper Patient . . .	231	Superintendent—Daily Duties	242
Criminal Lunatic	231		

CHAPTER XXV.

ASSISTANT MEDICAL OFFICERS.

Deputy-Superintendents	245	(2.) Indirectly Preservative Con-	
General Duties	247	duct	260
Case Taking	251	Reproductive Activities . .	260
Observation of the Conduct of		Social and Political Activities	262
Patients	257	Religious Observance . . .	264
(1.) Directly Self-Preservative		Recreative and Æsthetic Ac-	
Conduct	257	tivities	264
The Prehension of Food.	257	(3.) Mind	264
The Avoidance of Mechanical		Feeling	265
Injuries	258	Thoughts	265
The Avoidance of Non-Me-		Disorder of Memory . . .	268
chanical Physical Dangers .	259	Methods	269
		Care of Instruments	271
		Photography	273

CHAPTER XXVI.

OTHER OFFICERS AND ATTENDANTS.

The Clerk	274	The Matron	278
Statutory Duties . . .	274	The Engineer	280
Documents to be Transmitted	275	The Head Attendants . . .	281
Entries in Books . . .	277	The Attendants	284
The Steward	277	Scheme of Lectures for Attendants	292

INDEX	296
-----------------	-----

GRIFFIN'S MEDICAL SERIES.

STANDARD WORKS OF REFERENCE FOR PRACTITIONERS
AND STUDENTS.

Issued in LIBRARY STYLE, large 8vo, handsome cloth, very fully illustrated.

HUMAN ANATOMY. By A. MACALISTER, M.A., M.D., F.R.S., F.S.A., Professor of Anatomy in the University of Cambridge, and Fellow of St. John's College. With 816 Illustrations. 36s.

"By far the most important work on this subject which has appeared in recent years."—*The Lancet*.

"This SPLENDID VOLUME."—*Saturday Review*.

HUMAN PHYSIOLOGY. By Prof. LANDOIS and W. STIRLING, M.D., Sc.D., Professor of Physiology in Owens College, Manchester; Examiner in the Universities of Oxford, Edinburgh, and London, and for the Fellowship of the Royal College of Surgeons. With 845 illustrations (a number in colours). Two vols. FOURTH EDITION. 42s.

"The MOST COMPLETE *résumé* of all the facts in Physiology in the language. Admirably adapted for the PRACTITIONER. . . . With this Text-book at command, NO STUDENT COULD FAIL IN HIS EXAMINATION."—*The Lancet*.

"One of the MOST PRACTICAL WORKS on Physiology ever written. EXCELLENTLY CLEAR, ATTRACTIVE, and SUCCINCT."—*British Medical Journal*.

CLINICAL DIAGNOSIS: The Chemical, Microscopical, and Bacteriological Evidence of Disease. By Prof. von JAKSCH, of Prague. Translated from the Third German Edition by JAS. CAGNEY, M.A., M.D. With all the Original Illustrations, many printed in colours. SECOND EDITION. 25s.

"Prof. v. Jaksch's 'Clinical Diagnosis' stands almost alone in the width of its range, the THOROUGHNESS of ITS EXPOSITION, and the clearness of its style. . . . A STANDARD WORK, as TRUSTWORTHY as it is scientific."—*The Lancet*.

CLINICAL MEDICINE: A Practical Handbook for Practitioners and Students. By JUDSON BURY, M.D., M.R.C.P., Senior Assistant Physician, Manchester Royal Infirmary. With numerous Illustrations.

GOUT (A Treatise on). By Sir DYCE DUCKWORTH, M.D. Edin., F.R.C.P., Physician to, and Lecturer on Clinical Medicine at, St. Bartholomew's Hospital. 25s.

"At once thoroughly practical and highly philosophical. The practitioner will find in it an ENORMOUS AMOUNT OF INFORMATION."—*Practitioner*.

RHEUMATISM AND RHEUMATOID ARTHRITIS. By A. E. GARROD, M.A., M.D. Oxon., Assistant-Physician to the West London Hospital. 21s.

"We gladly welcome this treatise. . . . The amount of information collected, and the manner in which the facts are marshalled, are deserving of ALL PRAISE."—*The Lancet*.

THE DISEASES OF CHILDHOOD (Medical). By H. BRYAN DONKIN, M.D. Oxon., F.R.C.P., Physician, East London Hospital for Children; Physician and Joint-Lecturer on Clinical Medicine, Westminster Hospital. 16s.

"In every sense of the word an ORIGINAL WORK . . . the results of the Author's OWN LARGE EXPERIENCE. Dr. DONKIN's is in every sense a FRESH BOOK, remarkably well written, and calculated to do good."—*The Lancet*.

DISEASES OF THE HEART (Diagnosis of). By A. E. SANSOM, M.D., F.R.C.P., Physician to the London Hospital, &c. With Illustrations and 13 Plates. 28s.

"Dr. Sansom has opened to us a TREASURE-HOUSE OF KNOWLEDGE."—*Practitioner*.

"We WARMLY COMMEND Dr. SANSOM'S TREATISE to all engaged in clinical work. A book which does CREDIT to British Scientific Medicine."—*The Lancet*.

DISEASES OF THE SKIN. By T. McCALL ANDERSON, M.D., Professor of Clinical Medicine in the University of Glasgow. SECOND EDITION.

"Beyond doubt the MOST IMPORTANT WORK on Skin Diseases that has appeared in England for many years."—*British Medical Journal*.

DISEASES OF THE EYE. By Dr. ED. MEYER, of Paris. Translated from the Third French Edition by A. FREELAND FERGUS, M.B., Ophthalmic Surgeon, Glasgow Royal Infirmary. 25s.

"An EXCELLENT TRANSLATION of a Standard French Text-book. . . . Essentially a PRACTICAL WORK. The publishers have done their part in the tasteful and substantial manner characteristic of their medical publications."—*Ophthalmic Review*.

RUPTURES (A Treatise on). By J. F. C. H. MACREADY, F.R.C.S., Surgeon to the Great Northern Central Hospital, to the City of London Truss Society, &c. With 24 Lithographed Plates and Illustrations in the Text. 25s.

"Certainly by far the MOST COMPLETE and AUTHORITATIVE WORK on the subject. We conscientiously recommend it to all who have to deal with the affection of which it treats."—*Edinburgh Medical Journal*.

LONDON: CHARLES GRIFFIN & CO., LTD., EXETER ST., STRAND.

HR Burpitt.

ASYLUM MANAGEMENT AND ORGANISATION.

PART I.

H O U S I N G.

CHAPTER I.

GENERAL PRINCIPLES.

THAT part of the organisation of an asylum which provides for the housing of the patients includes, of course, the entire arrangement of the structure of the institution, and would therefore comprise all the details of the planning and building of the asylum. It is not proposed in this book, however, to encroach upon the province of the architect and the builder further than by laying down certain general principles which should govern asylum construction; and by treating in detail of those points of construction in which lunatic asylums differ conspicuously from other institutions, and on which the safety and comfort of the inmates largely depend.

With regard to the principles upon which an asylum should be constructed, regard must, of course, be had exclusively to the objects that it has to serve; and since a lunatic asylum is a place for—

- (1.) The detention, under
- (2.) Care, and
- (3.) Treatment, of persons who
- (4.) Are disposed to be either melancholy or turbulent;
- (5.) Have tendencies to injure themselves or others;
- (6.) Are unable to protect themselves from ordinary sources of danger;
and
- (7.) In very many cases have to spend most of their lives in it:

it is evident that the principles upon which it should be constructed are—

- (1.) To make it a healthy residence ;
- (2.) To provide for the complete and continuous supervision of its inmates ;
- (3.) To facilitate treatment ;
- (4.) To allow of the separation of the patients into small groups ;
- (5.) To exclude opportunities for self-injury and violence ;
- (6.) To remove, as far as possible, sources of danger ;
- (7.) To make it bright, cheerful, and comfortable ; and
- (8.) To attain these objects with the strictest regard to economy, both of original expenditure and of subsequent working.

(1.) **Sanitary Conditions.**—The first object, that of making an asylum a healthy residence, has been successfully attained in the great majority of asylums in this country ; and in those which are faulty in this respect, the faults are being amended. Now that sanitary science has attained to such a high development, and a knowledge of sanitation is so widely diffused and so easily attainable, it will not be necessary here to deal with the subject at all, except in respect to those special points which will be subsequently referred to, in which the sanitation of lunatic asylums differs from that of other large institutions.

(2.) **Supervision.**—The building should be so arranged as to facilitate the supervision of the inmates. With this object, sedulous care should be taken to avoid dark passages, obscure recesses, intricate arrangements, places that can be utilised for hiding or that facilitate the escape of patients from supervision. There must be no unguarded means of access, from any part that is frequented by patients, to spaces above the ceilings or under the floors, into the open air, or on to the roof.

(3.) and (4.) **Treatment and Grouping.**—In the construction of the building much can be done to facilitate observation and treatment by providing for the separation of the patients into small groups, and by the absence of wards in which large numbers of patients must be aggregated together. In nothing is the treatment of insane persons so defective as in individuality,—in the close attention to and study of individual cases. They are dealt with far too much in the mass, and to this method of treatment are ascribable most of the deficiencies, of the accidents, and of the untoward events which continuously exist or from time to time occur in lunatic asylums. All the other improvements in the treatment of the insane put together do not approach in importance or desirability the one improvement of increasing the **individuality** of our mode of dealing with them ; and one great obstacle in the way of such an increase is the custom of aggregating a great number together in

a single ward. How is it possible, in a ward containing a hundred or more of patients, to afford to any one a mode of treatment widely different from that of the rest? And if it were possible, how are we to prevent the occurrence of jealousy and heartburnings among the crowd? Moreover, apart from the question of treatment, the segregation of patients into small parties is most desirable from other considerations. It is most desirable to limit as far as possible the provocations, real or imaginary, that an aggressive patient may be given, by restricting the number of persons with whom he is habitually in contact. It is most desirable to minimise as far as possible the excitement that may be occasioned by a single turbulent patient, by limiting the number of persons who are obnoxious to his turbulence. It is most desirable to minimise the annoyance and disgust that are occasioned by a single patient of filthy or objectionable habits, by diminishing as far as possible the number of spectators. There is in my opinion no influence, and no combination of influences, that is capable of effecting anything approaching to the beneficial result upon the lives and the malady of insane persons, that could be effected by this one of greater individuality in the study and treatment of their cases; and great individuality of treatment is not to be attained so long as the structure of asylums provides only for treatment of the insane in bulk. Though I had long held the opinion that more careful personal study and a treatment more closely adapted to individual needs would be attended by greater success in the treatment of insanity, yet when I was enabled, by the restriction of the patients of whom I had charge to a very few, to devote practically unlimited time and attention to their care, I must own to being astonished at the amount of improvement that followed; improvement that was by no means limited to recent cases, but occurred in cases of thirty and thirty-five years' standing.

Of course, the question is very largely a question of expense, and there is no doubt that the aggregation of patients together in large wards, and the aggregation of large wards into huge asylums, has much to be said for it on economical grounds; nay more, it must be admitted that the provision of numerous small asylums, or of large asylums with very numerous small wards at the public expense, would not be justifiable if it were found, as it probably would be found, to entail a large increase of expenditure. But although the universal adoption of the method of segregation is not possible in public asylums, much good might be done by the provision in each large asylum of a few small wards in which a small number of patients might be placed without waste of room; and in wealthy hospitals the method, which is to some extent employed, might be still further extended. Unfortunately, the increased expense of the plan is not in construction only. There is much

increase in the expense of management also, for a much larger staff of attendants must of course be employed.

There is, however, a method by which the disadvantages of the excessive size of the wards in some of our great asylums might be reduced, and a certain, if a small, amount of privacy and seclusion granted to the patients, without any great alteration being made, or any great expense being incurred. Nothing would be easier than to place between the windows a series of folding screens, of which one edge should be hinged to the wall and the other be free. The leaves may be divided into panels, and the upper panel in each leaf glazed. These screens, when not in use, would be folded flat against the wall; but they could on occasion be pulled out so as to enclose a small area, within which a small group of patients could sit, separated by this slight barrier from association with the rest of the ward, and here they could have their private conversation, their private tea-parties, their games of draughts or cards or chess, comparatively undisturbed by the turmoil of the ward at large.

By such means the evil of enormous wards may be mitigated, but in an ideal asylum no very large wards would be permitted. The average number of patients that a ward should contain, in an asylum constructed regardless of expense, should in my opinion be about ten; some should be limited to four or five, and none should contain more than thirty. I am aware that in public asylums these figures cannot be adhered to, but I still think that wards containing more than thirty patients should, in ordinary asylums for all forms of insanity, be rare.

(5.) and (6.) **Precautions.**—Precaution has to be taken in the construction of the building against affording opportunities for the patients to injure themselves or others, wilfully or accidentally. The chief mode of self-injury is by hanging, and of accidental injury by falls. The construction of the asylum must, therefore, be such as to offer no opportunity for the one and no facility for the other. These matters will be dealt with subsequently under different headings.

It is undesirable that an asylum should be more than two stories in height, on account of the difficulty of providing means for escape from fire and of extinguishing fire.

Every ward should be accessible without passing through another ward.

Size.—With respect to the maximum number of patients that ought to be accommodated in any one asylum there is a wide difference of opinion, and the opinion has not always been expressed in very temperate language.

Generally it may be taken that in large asylums the cost is less, while in small asylums the individuality of treatment is greater. These are

the broad differences between large and small asylums, but there are other considerations also which have to be taken into account.

Cost.—About the smaller weekly cost per patient in large asylums there can be no doubt. Taking ten of the largest and ten of the smallest asylums from various parts of the country, the former with an average of 1600 patients, the latter with an average of 360, the difference in favour of the former is nearly eight per cent. If we examine the capital outlay on land and buildings, we find that the cost per patient of the small asylums is five per cent. greater than that of large asylums. These differences are considerable, and, in rate-supported institutions, not only cannot they be disregarded, but it would require very cogent reasons to outweigh them.

Equipment.—Another important advantage that large asylums possess over small ones is in the greater completeness of their equipment. It may usually be taken for granted that the larger an institution is, the more complete will its equipment be. There are certain appliances the need for which is occasional only, and the smaller the number of patients the less frequently on the average will the need for these appliances arise, and the less willingly therefore will their cost be incurred. There are other appliances which can only be profitably employed for very large numbers. Again, in a small asylum the amount of work in a given department may be insufficient to justify the employment of an official for that department alone, and the duties of two or more departments may have to be undertaken by a single official, such duties being, of course, less efficiently performed than if there were a separate official in each department. Thus, in small asylums, the duties of clerk and steward, of medical officer and dispenser, of head attendant and labour master, are often combined respectively in the same individuals. In short, the larger the asylum the greater the specialization of equipment that is attainable, and specialization and efficiency usually go together.

On the other hand, in small asylums study and treatment of the patients is commonly marked by much greater individuality. The patients, their histories, their cases, their peculiarities, their needs, are known to the superintendent with a completeness of knowledge which is quite impossible in the case of larger asylums; and it is not to be doubted that their lives are in consequence happier, and their chances of recovery more favourable.

Accessibility.—A great drawback to asylums of large size is in the inaccessible situations which are usually, from economical motives, chosen for them. Where one asylum has to serve a very large district there must be parts of the district from which the asylum is very remote, and patients who come from these remote parts are debarred in a great measure from receiving visits from their friends. Not only is a large

asylum less accessible from certain parts of its district, but it is as a rule placed in a more remote situation than a small asylum, and therefore generally more inaccessible.

Upon the balance of advantages it cannot be doubted that the small asylum is much the most desirable, individuality in the treatment of the patients being by far the most important factor to be considered in the administration of an asylum ; but, on the other hand, considerations of cost will always tend to increasing the size of asylums rather than to their multiplication in number.

The question naturally arises whether it would not be possible, by increase of the medical staff, to secure the main advantage of small asylums together with the economy of those of larger size ; and here it should be pointed out that the efficiency of medical treatment depends far more upon the number of new cases that are *admitted annually* than upon the number that are permanently in residence. It is obvious that the amount of labour that falls on the medical staff depends very largely upon the number of new cases that come under treatment. Cases that have been for a long while under observation and treatment, and that are thoroughly well known, can be managed with little difficulty and require a comparatively brief expenditure of time. It is the new cases that take the time, that give the anxiety, and that involve the responsibility. An asylum of 600 patients into which 300 are admitted every year will entail upon the medical staff as much labour and as much responsibility as one of 1000 patients into which only 200 are admitted annually.

As to the general plan of the building, there has long been a struggle between the two types known respectively as the "Gallery" type and the "Pavilion" type of building ; but into this it is not necessary to enter, inasmuch as the matter is now practically decided in favour of the latter. Every asylum is now built of a number of separate blocks, connected together by covered corridors. Whether the pavilions should be arranged in linear series, *en échelon*, on the **H** or the broad arrow plan, is a matter which must vary with the size and the site of the asylum, and must be left to the architect to settle. For our consideration the asylum is divisible into three sections : the portion for the occupation of the patients, the administrative portion, and the communications.

CHAPTER II.

GENERAL ARRANGEMENTS.

THE patients' portion of the asylum is primarily divided, of course, into two sides, one for the males, the other for the females, which are, in so far as the habitable portions are concerned, practically duplicates of each other. In addition, there are portions—the Dining Hall, the Recreation Hall and the Chapel, the Receiving Room and Visiting Room—for the common use of both sexes.

On each side of the building will be separate wards, which will become, under the modern practice, separate pavilions, for the several classes of patients as set forth in Chap. XXIII. p. 209, and the proportions in which accommodation should be provided for the different classes, while differing somewhat in different localities, will not on the whole be widely different, in an asylum for all classes of patients, from those given below :—

Class.	Males.	Females.	Proportion of Single Rooms to Total Beds.
			Per Cent.
I. Recent admissions	5	6	25 to 30
II. Epileptics	20	15	10 to 12
III. Suicides, general paralytics, &c.	15	12	10
IV. Infirmary	15	20	5 to 8
V. Turbulent patients	4	5	20
VI. Chronic cases	30	30	5 to 10
VII. Convalescent and industrious .	9	10	3
VIII. Noisy patients	2	2	100
	100	100	

These blocks or pavilions should be so arranged that the infirmary is as near as possible to the quarters of the medical officers, so as to facilitate frequent visits. The infirmaries will of course consist chiefly of dormitories, but a small day-room should be annexed to each, so that those patients who are convalescing from bodily maladies may have change of scene and air, and so that the day population of the dormitories may be diminished. To every infirmary a small ward kitchen should be attached, so that food may be readily prepared for the sick as occasion arises, without the delay of sending to the general kitchen for every trifling and occasional viand required.

In next closest proximity to the medical officers' quarters, as requiring

the next greatest facilities for ready and frequent access, should be the wards for recent cases and new admissions. In these wards the day-rooms only need be small. The dormitories will be fitted for continuous observation, and will therefore be of the size in which observation can be most economically as well as efficiently carried out. (See *Dormitories*, p. 30.)

For the epileptic ward, and for the wards for suicidal cases and general paralytics, observation dormitories will be required; but for the other wards no special features of construction will be needed except for Class VIII.

The block for the sleeping accommodation of noisy patients should be specially constructed in such a way as to deaden sound. The walls should be thick, and should consist of an inner and an outer shell with a space between. The windows should be no larger than is necessary to admit sufficient light. The floors should be double, with a layer of sawdust or similar packing material between the layers. The door-frames should be provided with a bead of indiarubber for the doors to close upon, and the doors should be double.

The hospital for infectious cases should be large enough to accommodate from 2 to 5 per cent. of the number resident on each side of the building, and may be, and usually is, constructed to contain both sexes in one building. It should have attached to it an efficient disinfecting stove and destructor.

To every ward are attached the customary offices, including scullery; store-room; a room corresponding with a housemaid's pantry for storing brooms and brushes, and containing a slop sink; bath-rooms; lavatories; closets; and urinals. A most desirable addition, though not a constant one, is a boot room, and less desirable compartments sometimes added are a soiled linen room and a coal cupboard.

Before treating of the several sections of the building in detail, it will be well to take certain features common to all, such as walls, floors, windows, &c.

The Walls.—The interior surface of the walls is commonly, for economy sake, of bare brick, and, although this unfinished surface is not to be commended, it is likely, for the reason mentioned, to prevail in the majority of asylums. The bricks should, at any rate, be dressed, and the joints between them should be finished flush, and not as on outside surfaces. Projecting corners should be of bull-nosed bricks, to do away with the sharp edge, which is likely to be chipped, and thus rendered unsightly. Inside walls, when of bare brick, should be painted in oil, and not distempered. The oil-paint stops the pores of the brick, thereby not only increasing the warmth of the wards, but helping to keep them sweet and healthy; it is, moreover, much more easily and

thoroughly cleaned, and more durable than distemper. Plastered walls also, when used, should be painted. It is not usual to add a wainscot to the walls of asylums, nor is it desirable, and for a skirting may be substituted a ledge of wood, 3 inches wide and $\frac{3}{8}$ inch thick, nailed to the floor round the sides of the room. This will prevent the chairs and other furniture from being placed in contact with the wall, a practice that results in damage and disfigurement to the paint.

The Floors should be of boards not more than 5 inches wide. If wider they are very apt to warp into a curve with the convexity upwards, and such warped boards, if polished, become very dangerous, especially if covered with loose carpet or mats. When the foot is placed on the carpet, the latter slips from the smooth bulging wood, and a dangerous fall is often the result. Narrower boards are less liable to warp; the curve, if warping does take place, is less pronounced; the foot is less likely to depend for support upon a single board, and the chances of accident are lessened. Also, the narrower the board, the less the shrinkage, and the narrower the crack left between adjacent boards, and therefore the less the opportunity for the accumulation of filth, damp and decomposing matters. In those positions in which the traffic is very great, the boards should be of pine or oak. Floor boards should be carefully laid, and cramped close together.

To stain and polish floors.—The cracks and recesses over the nails should first be filled up with stopping stained to the tint that the boards are to have. If stopped with ordinary white putty, the putty will not take the stain that is applied to the boards, and unsightly patches will be left. Wash the floor. When dry, stain with black japan thinned down with turpentine to the proper tint. This is better than the oak stain that is sold for the purpose, as it sinks deeper into the floor, and therefore does not so soon wear off. Leave for twenty-four hours to dry. Size, and leave again for twenty-four hours. Polish with either of the following mixtures:—

1. Beeswax 1 lb., turpentine $\frac{1}{2}$ gallon. Shred the wax and put it in a stone bottle with the turpentine near the fire. Or
2. Beeswax 1 lb., turpentine 1 quart, linseed oil (raw) 1 quart. Or
3. Beeswax 1 lb., turpentine 3 pints, Castile soap $\frac{1}{4}$ lb., water $\frac{1}{2}$ pint. Shred the beeswax and dissolve in the turpentine; shred the soap and dissolve in the water; mix.

Whichever polish is used, paint it on the floor, and rub with hard brushes until it shines. Take care not to polish so highly as to make the floor dangerously slippery.

The Windows.—The best form of window to give free ventilation and plenty of light, at the same time with safety to the patients, has yet to be devised. In old asylums (and, indeed, in some modern asylums),

the common form of sash window is adopted, the sashes being "stopped" so as to prevent them from being opened more than about 6 inches. It is, however, manifest that a device which requires the whole of a heavy sash to be moved in order to obtain an opening 6 inches deep involves a great waste of labour at each opening and shutting. Moreover sash windows are open to the further objections that they do not admit of being made very large; that when "stopped" they do not give sufficient ventilation; that stops are sometimes broken, sometimes taken out to open the windows for cleaning and forgotten to be replaced; that patients sometimes unscrew the stops; that sash cords are apt to break; that for the security of the patients the panes must be made small and the frames heavy. For all these reasons sash windows are undesirable, but no efficient substitute for them has yet been devised. In many modern asylums the windows are made of long and narrow panes, say 4 feet long and 6 inches wide, fixed vertically in iron frames, and one of these panels in the middle of the window opens on lateral hinges for ventilation. This arrangement is far from perfect. The long vertical opening gives rise to an unbearable draught, and the patients complain bitterly when the window is open. An opening of 6 inches in width by 3 or 4 feet in length is quite sufficient to allow of persons of small physique squeezing themselves through, and I have known several such cases. Indeed one case is on record in which a patient killed herself by squeezing through a stopped window sash which opened only $5\frac{1}{2}$ inches. The iron frames soon become rusty on the inside, owing to condensation moisture, and then cruelly punish the hands of the patients who clean the windows.

The following are the conditions which should be satisfied by a window of an asylum:—

1. It should be tall enough to reach nearly to the ceiling, so as to give a maximum of light, and so as to minimise the thickness of the stratum of stagnant air at the top of the room.

2. It should reach down to within 2 feet 6 inches, or at most 3 feet of the floor, so that patients seated in the ward can see into the grounds without difficulty.

3. The upper portion, for 18 inches to 2 or even 3 feet, according to the height of the ward and of the window, should open as a sheringham valve, being controlled by an iron rod at one side, by which it can be fixed at any angle between the vertical and 45° . This rod should be fixed by means to which the patients have no access. The bottom of the window, for a height of 5 inches, should open in a similar way, but should be hinged at the top instead of at the bottom, and should open outward instead of inward. This opening also should be regulated by a lock of which the attendants alone should have the key.

The intermediate portion of the window may be an iron framework, provided that it is painted with enamel paint, and the pattern of this framework may vary at pleasure, provided always that no aperture is left large enough for a patient to squeeze through, supposing the glass to be removed. If a pane is 18 inches or more in length, the width must not be more than 5 inches. With a length of 1 foot, the width must not exceed 6 inches; and a square pane must not be more than 8 inches in the side. One window in each ward should be capable of being widely opened, and should have a canvas shoot attached to it, for the escape of patients in case of fire.

It is sometimes necessary, when a building which was intended for other purposes is converted to asylum use, to guard the ordinary sash windows with large panes—one or two panes only in each sash. This may be successfully done by a light and ornamental framework of steel rods of small diameter, interlaced so as to reinforce each other's strength, and presenting irregularly shaped apertures, which may, in consequence of their irregular shape, be larger in some of their dimensions than rectangular apertures. This method is peculiarly suited to licensed houses, as its ornamental character conceals almost entirely its restraining purpose. Where they can be employed, sash windows have this great advantage—that they are home-like. They are the ordinary form of window which is customary in private houses, and they do not therefore proclaim to the patient who looks through them that he is in an institution.

Blinds.—It is necessary that the windows should be furnished with blinds, both for appearance sake, to give the rooms a more home-like and furnished air, and to keep out the direct sunshine on occasion. The great drawback to blinds is that they are commonly furnished with cords, which offer temptations to suicide, have been repeatedly used for the purpose of suicide, and are a constant source of anxiety on this account to officials.

The cord that usually depends from the middle of the blind, and is used for the purpose of pulling it down, should not be affixed to asylum blinds. Its place should be taken by a stout ring into which a hook on the end of a stick can be inserted to alter the height of the blind when needed. The old-fashioned device of an endless cord at the side of the blind, which keeps the blind by its tension at the height at which it is left, should also be abolished, and its place taken by an arrangement which will constantly tend to pull the blind up. For this purpose a spring roller is unsuitable, the springs being constantly out of order and refusing to act. A more reliable device is a weight attached to a cord which is wound up on the roller when the blind is pulled down, and which, when the blind is released, descends, and of course unwinds

itself from the roller and thereby raises the blind. The weight and cord should descend in a closed case so as to be inaccessible to the patients. In order to maintain the blind at such a height as may be needed, the ends of the rod at the bottom of the blind should fit into notches in the window casing as in the case of the blinds of railway carriages. Three pairs of notches to each window will be sufficient, one at the bottom, one half-way up, and one midway between the last and the top. By this means exact uniformity in the height of all the blinds in each ward may be secured, and an appearance of neatness maintained.

The Locks.—The locks of an asylum should be divided into three suits, one for the male side, one for the female side, and one for the stores, subdivided into as many subsuits as may be required. There should be a sub-master key on each side for the male and female Head attendants respectively, superior master keys for those officials who may have access to both sides of the building, and a full master key for the Superintendent.

All outside doors and all communication doors dividing the male from the female side, or either side from the administration, should be capable of being master locked, so that no key lower than a superior master key can open them.

All locks should be spring-locks, unless there is some definite reason to the contrary.

The locks of gas-taps, towel-rollers, windows, shutters, fire-guards, &c., should all be passed by the same key, and this key should not be the common railway key, which is easily counterfeited by a bit of stick.

The keys of the store-cupboards in each ward should be different from those of all other store-cupboards, so that attendants cannot appropriate stores from another ward to make up their own deficient stock.

All locks should be very substantially made, as the wear they have to undergo is very great. All should have the bolts, wards, levers, tumblers, and other working parts made of gun-metal, as being most durable. Shutter locks, locks for legs of beds, and other locks for positions in which they are liable to be washed or wetted, should be wholly of gun-metal.

The seuteheon of the door locks should be saucer-shaped, and counter-sunk into the door. By this device the key finds its way into the key-hole with a minimum of guidance, and the surface of the door around the keyhole is preserved from defacement.

Keys should be stout and substantial, and of hardened steel. The locks and keys should be so made that the key cannot be made capable of passing a lock of higher class than that it is made for without having a piece *added on* to it. When a key can be made to pass a lock of higher class by having a piece *taken off* it, any attendant can so alter his

key by means of a file as to make it pass a lock that he has no business to open.

It is advisable to make the pin of the key long enough to project on the further side of the door when inserted into a lock, and in this end to cut a slot. By this means, if a key is inadvertently left in a spring-lock on the inside, and the door is shut, it can be opened by a screw-driver and without the necessity of forcing the door.

Many modifications of locks are met with in asylums, some of which are rather fanciful than useful. There are locks which are locked by turning the handle, but cannot be unlocked without a key, and *vice versa*. But all these fancy locks can very well be done without, and need not be described. The cardinal principle on which asylum locks should be constructed and arranged is to diminish to a minimum the number of keys that any one person has to carry ; in other words, to bring as many locks as possible into one suit, and to limit, by modification of the keys, the number of persons who have access to them.

HEATING.

While much dependence will always be placed upon stoves and open fires for warming asylums, there will in every asylum be wards in which these means are insufficient, and they are obviously inappropriate for single rooms and corridors. A system of heating by hot water or steam pipes is therefore a necessity in every asylum, and it is a question whether open fires should not be entirely abolished, and the warming of the building effected solely and entirely by other methods.

1. Open Fires.—The arguments in favour of open fires are four in number. First, what may be termed the sentimental argument. The prejudice in this country in favour of “the cheerful open fire” is very deeply ingrained. The fire is an object of interest, a centre of attraction, and, what is of no small importance, its retention in the wards of asylums tends to assimilate these apartments in some degree to the common form of dwelling-room prevalent in private dwellings, and so to diminish the feeling of strangeness, or unhomeliness, that is inseparable from residence in large institutions. The second advantage of open fires is the great and unquestionable aid that they give to the ventilation of the ward. The third advantage is its extreme simplicity, and the impossibility of its failing from any other cause than a deficiency in the supply of coal ; and the fourth is the healthy quality of the warmth thus produced.

On the other hand, the disadvantages of open fires lie in the great expenditure of labour necessary in distributing the coal ; in the inequality of the temperature produced, the neighbourhood of a large fire being unbearably hot while the remote corners of a large ward may yet fail

to be sufficiently warmed ; in the dust and dirt inseparable from their use ; and in the uneconomical expenditure of fuel that their use commonly entails.

2. Hot Coils in the Wards.—The substitution for open fires of hot coils in the wards is certainly not to be commended. The warmth that they produce, while more evenly distributed than that of open fires, is of much less healthy quality. It is a close, stuffy, often stifling, heat. The fire warms the solids of the room first, and leaves the air at a much lower and therefore more comfortably respirable temperature. The hot coils heat the air first, and the solid contents and boundaries of the room are raised in temperature by contact with the heated air. Hence the feet may be very cold while the air respired is considerably rarefied by warmth. Another disadvantage of the hot coils is the great dryness of the air in apartments warmed by them ; and a third, which is of no small moment in asylums, arises from the habits of the patients in stuffing putrefiable substances—food, rags, &c.—through the interstices of the gratings which protect the coils, and thus giving rise to unbearable stench whose origin is not apparent, and whose removal is often difficult. The stench produced by urine on a hot water or steam coil is particularly penetrating, offensive, and difficult to cure.

3. Hot Coils Outside the Ward.—The only system of heating that can ever successfully compete with that of open fires is by propelling into the wards air which has been heated by passing through a steam or hot water coil outside the ward, at the same time extracting the used air by means of other apertures and shafts. In favour of this system are several very cogent arguments. It is clean. It involves no carrying of coal or removal of ashes, with the invariable accompaniment of strewing coal dust, ashes, and cinders over the floors. It combines warming with efficient ventilation. It admits of fresh cool air being pumped into the ward in summer. It is equally applicable to all parts of the building, and by a system of valves and dampers it admits of a nice regulation both of temperature and of ventilation.

On the other hand, it is very complicated. It requires a very accurate adjustment of the size of the flues to the capacity of the wards. It is not always successful, and the causes of its failure are often difficult to ascertain. When it works efficiently it is an almost ideally perfect means both of warming and of ventilation, but it is not at present sufficiently reliable to warrant the abandonment of open fireplaces.

Galleries, corridors, and passages, where it is considered desirable to heat them, are best heated by steam coils fixed therein ; but in all cases in which steam or hot water coils are accessible to patients, the covers should be made easily removable, and their interior should be frequently inspected for the reason given above.

The Fireplaces.—In very large wards it is necessary to use stoves standing in the middle of the ward, as sufficient heat cannot be obtained from the ordinary form of grate. Of stoves standing independently of the walls, one of the best is the thermohydric stove devised by Mr. Saxon Snell. It shows an open fire, and at the same time offers the advantage of discharging into the room air heated by hot water pipes. Smaller wards and rooms in general may be heated by one or more of the ordinary grates of which there is such an abundant variety in the market. Undoubtedly the best form of grate is that which embodies most completely the following conditions :—

1. The firebars should be not more than 3 inches above the hearth.
2. The throat of the chimney should be not less than 2 feet above the firebars.
3. The fireplace should not be countersunk deeply into the wall, but rather should project into the room.
4. As much firebrick and as little iron as possible should be used.
5. The bars in front should be very narrow and vertical, and the front of the grate should be flat from side to side as well as from above down. It should be provided with a screen or damper to hook over the top bar and cover the vertical bars, so as to convert the grate into a box open only at the top, in which a banked-up fire will remain alight for many hours.
6. The chamber beneath the firebars should be closed by an economiser.
7. The back of the fireplace should incline forwards at an angle of about 70° for a height of 18 inches above the firebars.

Several of these conditions were formulated by Pridgin Teale, and most of the others are satisfied by the grates made in conformity with his directions ; but even the best of them are apt to be deeply countersunk into the wall, and thereby to waste a good portion of their heat.

The importance of these principles is seen in the failure of those grates which are constructed with disregard of them. It is possible to burn an enormous amount of coal in a very short time without heating the room in which it is burnt, if the grate is sunk deep into the wall, or placed high up in the chimney throat, if the latter is very capacious, or if the front of the grate is made of massive bars placed close together, or if the back of the grate inclines backwards so as to reflect the heat well up the chimney. In such a grate, if of full size, say 24-inch, half-a-hundred weight of coal can be burnt at a white heat in a couple of hours without perceptibly warming the room. What is needed in a fire that is intended to warm a room, is not a great *intensity* of heat, but great *volume* and *endurance*. It is to be remembered that a room becomes warm by the warming, not primarily of the air, but of the walls

and furniture and contents, which, secondarily, communicate their temperature to the air in contact with them. To warm the furniture of a room through and through, and to warm the walls to a certain depth, it is necessary that they should be subjected to the influence of warmth for a certain *time*, and no intensity of heat in the fireplace is sufficient to warm the room unless time is given for it to act. Moreover, an intense heat is disagreeable to those who are subjected to it, is destructive to furniture, and a very hot fire is very uncomfortable. In a properly constructed fireplace the coals should never reach a white heat, scarcely ever a light yellow heat; from a cherry red to an orange is the proper colour for a good warming domestic fire.

The principle of employing the maximum of firebrick and diminishing the amount of iron in grates, has recently undergone an extension by the invention of the "front hob grate," in which the front bars are abolished and a slab of firebrick substituted. This grate is said to give a very enduring, economical, and clean fire.

Fire-guards are not essential in all wards, but in most they are a very necessary precaution. In these, as in all appliances in use in asylums, the modern tendency, a very righteous and commendable tendency, is to substitute for the massive and forbidding structures of former days, a structure not deficient in strength, but lightly made, and as far as may be, elegantly shaped. The fire-guards of the last generation were huge weighty structures, made of thick iron bars, large enough and strong enough to keep in security a full-grown tiger, without depriving him altogether of exercise. The modern guards are of stout wire, firmly knit together indeed, but having the appearance of fire-guards and not of wild beast cages. They should be so shaped and made as to present no sharp corners or projecting angles, but to have the top rounded off to the front and sides, so that, in the event of a patient falling on them in a fit or otherwise, he would not be liable to severe injury. They should, of course, be locked into their places, and, when large, may have a door in their front, which should also, of course, be kept locked.

LIGHTING.

No doubt the ideal form of lighting for asylums, as for other buildings, is by electricity, but it may be taken for granted that in the great majority of asylums gas will continue to be the main form of illumination for many years to come. Gas may, however, be applied to the purpose of lighting in many ways, and of all these ways that of the common bracket burner is undoubtedly the worst. The flame is naked, and is usually within reach of the patients, for the light it gives is so little that unless placed low enough to be within their reach it is of

little use as an illuminant. Consequently, it is a constant source of anxiety and of danger. The bracket forms, moreover, a most convenient point of support for the rope of the suicide; it is easily broken by a patient's weight, should a mischievous patient hang on to it with his hands; and, when broken, the escape of gas would of course be very dangerous. The common pendant, also frequently used in asylums, is almost equally open to objection.

The best form of burner is undoubtedly the regenerative, or one in which the flame of the burning gas heats the air for its own supply, the burner being on a short pendant and enclosed in a hemispherical glass. These burners not only give an excellent light, which is not intercepted, as in the previously mentioned forms, by iron-work below the flame; but are from their height inaccessible without steps; can be turned down to a mere glimmer during the day, and turned up when required, without the necessity of carrying about a naked flame to light them. Their defect is that the burners require frequent attention to keep clear the apertures for the passage of the gas. If this is not attended to, the deposit on the inside of the vertical supply pipe falls down into the burner, and chokes up several of the apertures. The consequence is that the gas passes through the neighbouring apertures under increased pressure, the result is a long jet of flame which impinges against the glass globe and cracks it; and the fracture of the glass renders the lamp useless. This system of lighting is of course suitable to large apartments only. The old form of burner is applicable to single rooms (*which see*).

Gas Meters.—It is very important that to each department having a separate jurisdiction, that is to say, to each ward or group of wards under the charge of one chief attendant, to each workshop, to each group of quarters allotted to the staff, a separate gas meter should be affixed; and this meter should be read and recorded *daily* by an official employed for the purpose, under the direction of the engineer. It is difficult to estimate the amount of saving that would be effected by the systematic observance of this means of checking waste. Waste from mere escape from leaky pipes or faulty fittings is not so much to be apprehended in the case of gas as in that of water; but waste by improvident expenditure is much more common, and can only be efficiently checked by the means here enjoined.

WATER.

The water supply of asylums is usually obtained from a deep well, and is pumped into a cistern on a water tower, whence it is distributed by gravitation to the building. This system necessitates, of course, a

powerful pump, with its necessary accompaniments, a steam-engine and boiler-house. The extreme and vital importance of the water supply renders it necessary that pump, engine, and boiler should be duplicated, so that in the event of any portion of the system breaking down, the working may not be interrupted. The engines are also adapted for working the machinery of the laundry and the pumps of the fire apparatus; and the boilers for distributing steam to the various parts of the building in which hot water is needed.

The water tower should be at least 20 feet higher than the highest part of the remainder of the asylum, and the tank should be capacious enough to hold at least forty-eight hours' supply. The pipes, both the rising main and the supply, should of course be inside the tower, in order to guard against frost. In a conspicuous position, frequently passed by both the engineer and the superintendent, should be an index, actuated by a float in the tank, showing the depth of water, or better, the number of gallons contained therein.

The Softening of Water.—The water obtained from deep wells in this country almost always has its origin in the chalk, and is therefore extremely hard, and possesses all the disadvantages for use in steam boilers, for washing, cooking and making beverages, which hard water is so well known to possess. When the various items of expense and waste involved by the use of hard water are considered; when regard is had to the necessity of frequently throwing the boilers out of use in order to conduct the tedious process of chipping the lime out of their interior; when the increased quantities of soap, soda, and labour necessitated by the use of hard water in the laundry are reckoned; when the increased amounts of tea and coffee necessary to make palatable beverages with hard water are considered; the question will naturally present itself whether one of the several methods of softening water that are known to be efficient should not be employed in asylums, and would not effect a saving of cost as well as an improvement in the palatability of many articles of food. This question can scarcely, however, be answered in the affirmative for asylums of every size. In a small asylum, containing, say, 400 or 500 patients, the interest on the original outlay for plant, the cost of materials, and labour necessary for the process, would not be compensated by the saving effected. For it is to be remembered that while the labour required for the softening apparatus must be responsible, must be to some extent skilled, and must therefore be paid; the labour required for cleaning the boilers is usually supplied by patients. In large asylums, however, the case is different. Here the increased cost of the larger plant necessary is by no means in proportion to its increased size; and the cost per head of the inmates is correspondingly diminished. The cost, too, of operating a larger softening apparatus

is by no means proportionate to the cost of working a smaller one. It may in fact be very little more; and in asylums of 1000 patients and upwards it is probable that in most localities a water-softening apparatus would effect a saving more than commensurate with the expense incurred.

The softening of water on a large scale is effected by Clark's process, that is to say, by adding one ounce of quicklime to every hundred gallons of water for every degree of temporary hardness that the water possesses. The lime combines with the free carbonic acid in the water to form chalk, and since chalk is insoluble in water which does not contain free carbonic acid, not only is the chalk so formed precipitated, but the chalk pre-existing in the water, and to which the temporary hardness of the water was due, is also precipitated. This is the principle of all water-softening processes, the differences in detail consisting in the way in which the lime is added and the manner in which the precipitated chalk is removed.

The efficiency of the process depends entirely upon the proportion in which the lime is added. If the amount of lime is deficient, the whole of the removable hardness will not be extracted. If lime is added in excess, the excess will go to increase the hardness of the water. It is evident that if the lime is added in the proper proportion, but is yet insufficiently mixed with the water, the result will be doubly faulty. One portion of the water will receive an excess of lime, another portion a deficiency. An ingenious apparatus has been patented by Messrs. Gittins for thoroughly mixing the lime solution with the water. By it the lime solution is pumped into a tank, the pump being actuated by a water wheel which is turned by the flow of the water to be softened. The revolutions of the pump, and therefore the amount of lime solution discharged into the water, depend, therefore, on the amount of water flowing over the wheel, and can thus be accurately adjusted to it.

The methods of separating the precipitated chalk are practically only two. (1) It may be allowed to settle in large tanks or reservoirs, and the clear supernatant softened water drawn off; or (2) it may be removed by filtration. Of these methods the first is simpler, more easily managed, and requires less constant attention. The latter is more rapid and much more economical of space. In most public asylums neither of the advantages of the filtration process will be important, and the precipitation method will be preferred.

If the Gittins' pump and the precipitation process are employed, the expense of working the process will be minimal, and practically the expense will be almost restricted to the original outlay on plant, and the wear and tear, which latter will be inconsiderable. The plant required will be the pump and the series of settling reservoirs, four in number,

and the additional apparatus needed for pumping the water from the well into the water tower by two operations instead of by one. The expense of working will be the portion of a man's time in regulating the sluices, and the occasional clearance of the precipitated chalk, which can be done mainly by patients' labour.

Water Meters.—A very important point which is omitted, I believe, in every asylum, is the provision of water meters throughout the establishment. The expense of pumping water in a large asylum is very great. The points of possible waste, which include every closet, urinal, lavatory, sink, bath, draw-off tap, and fire hydrant in the institution, are extremely numerous, and the waste that actually occurs in every asylum, owing either to derangement of the fittings or carelessness on the part of the patients or staff, is enormous. In order to check this waste it is not sufficient that the engineer or his men should daily examine every closet, lavatory, and water-fitting throughout the building; it is also essential that to every ward, and to every department that has a chief official who can be made responsible, a water meter should be fitted. By the use of this appliance, the engineer, on being advised by his index that the water was being lowered in the tank with undue rapidity, could, in a few minutes, localise the point of waste and arrest it. Moreover, if a register were kept, as it should be kept, of the amounts of water used daily in each ward, not only would every ward be a check upon every other, so that the department in which habitual waste occurred could be identified, but any single occasion on which an excess of water was used could at once be made the subject of inquiry. Given a water meter measuring the supply to the general bathroom, a fair idea could be obtained from it alone whether every patient was bathed in a separate water, or whether there was a practice of bathing two or more without changing the bath.

CHAPTER III.

WARDS AND WARD OFFICES.

IN this chapter we propose to describe the Day-Rooms, Dormitories, and Offices generally.

A. *THE DAY-ROOMS.*

Day-rooms should be numerous. Even where the pavilion system is adopted, a day-room should never occupy the whole floor of a pavilion. Such an arrangement is fatal to any attempt at individuality of treatment.

No day-room should be built to accommodate more than fifty patients, and the great majority should be decidedly smaller than this.

Day-rooms should not have a northern aspect. They should be large enough to give an area of at least 40 square feet of floor space to each patient, and should be not less than 15 feet in height. Every day-room as well as every dormitory should have at least two separate exits to ensure safety in case of fire.

The walls should be painted in gay colours, and there should be plenty of variety in this as well as in all other variable respects in the different wards. Usually a dado in a darker colour is painted and finished with a stencilled line at the upper edge. Sometimes a stencilled frieze is added, but this is not desirable unless the chamber is unusually lofty.

A suggestion has been made to colour the ceilings blue instead of the customary white, but unless a room is unusually well lighted, a blue ceiling makes the apartment gloomy.

It is always an advantage for day-rooms to be of irregular shapes, with deep and capacious bays, which serve to some extent the purpose of separate apartments and allow of the segregation of the occupants of the ward into small groups. The bays may be further deepened by the attachment to the walls of screens, as suggested on p. 4, which in this position need not be of more than one or two folds.

FURNITURE.

The Floor Covering.—For this purpose cocoa-nut matting should not be used. It is most dangerous as soon as it gets worn, forming loops which are certain to trip up the patients and cause ugly falls. Carpet is neither cleanly enough nor durable enough except as strips in certain places, and even in this form it is objectionable, as, being loose, it is apt to slip on polished boards, and to catch the patients' toes with its edges. Oilcloth is cleanly, but it is not sufficiently durable. The most suitable material is linoleum, which is cleanly, moderately soft, and very durable. Linoleum should be varnished once or twice when first laid, a process which greatly increases its durability. It should be cleaned with soap and water, but not with soda, which is very destructive to it. In washing, care should be taken not to let the water get under the edge, or the canvas backing will rot. For bedsides and bathrooms, that form of linoleum which is called "cork carpet" is very suitable. It is less closely compacted than ordinary linoleum, is thicker, softer, and more noiseless, and appears to be almost equally durable.

Curtains are often provided, and give a certain homelike aspect to the wards, but their use is upon the whole not very satisfactory. If the patients sit much in the windows, as they should do, the curtains get

dragged out of place, and soon get dirty and untidy, if not ragged. The consequence usually is that either the curtains are unattractive or the patients are kept from just that position in the room which it is most desirable that they should occupy. A better plan is to have a valance of chintz or cretonne draped across the top of the window and hanging down on each side to within 5 or 6 feet of the ground. This will clothe the window and take off the bareness, at the same time that it will be well out of the way of interference by the patients.

Tables.—Ordinary deal tables, such as are known as kitchen tables, are commonly used in asylum wards; and for the purpose of use at meal times they are no doubt the best. When not put to this use they should be covered by table covers of some bright colour which is not antagonistic to the general tint of the walls. Beneath these covers the tables are often covered with that kind of American cloth which is made in imitation of white marble. This is fixed either by being turned under and tacked, or by narrow beads screwed to the edges of the table. Its use is, however, not very satisfactory, for it soon gets irreparably soiled by hot dishes and jugs being deposited upon it. If it is undesirable that the tops of the tables should be frequently scrubbed, they may be covered with glazed tiles, cemented in position, which will always be cleanly and neat, and are not injured by hot dishes nor soiled by slops.

Small tables should also be provided for patients to work at, for card and tea parties. These small tables may be square or round, but in either case should have four legs. Tables supported on a pillar and claws are too fragile and too easily overturned for asylum use.

Seats.—The windsor-chair, which is in common use in asylums, is not a very appropriate article of furniture for asylum use. It is heavy, it is unsightly, it is uncomfortable, and it is easily broken. A much better seat is the modern chair, made of bent wood, which is superior to the other in each of these respects. It is light, it is of agreeable appearance, it is not less comfortable, and it is much more durable. These chairs should be used only for sitting at the table at meals. For old and feeble persons to pass many hours in, they are most inappropriate, considering their height, their small seats, and their straight backs. For sitting and lounging in, an abundance of settees and easy chairs should be provided, and these should be of different patterns, to give variety to the wards, to suit all tastes, and to enable a sick or feeble patient to have rest by changing the kind of chair that he occupies. Arm-chairs of bent wood are strong, roomy, almost indestructible, and fairly comfortable. An excellent form of chair is a stout and strong edition of the American sling chair, the sides being formed each of two pieces of stout beech or oak crossed like an X, and a piece of carpet being slung from the top to the bottom rail. By making this carpet sufficiently long, *i.e.*,

with plenty of slack, it becomes impossible for a restless feeble patient to fall out of the chair by accident, and not very easy for him to get out intentionally. It is comfortable; it is very cheap; it can be made by any ordinary joiner; may be turned out in numbers from the asylum workshop; and may with the greatest ease be so fitted that the sling can be removed when soiled by a dirty patient, and replaced by a clean one in a minute or two. It is merely necessary to make the top and bottom rails wooden cylinders, the former 2 inches or $2\frac{1}{2}$ inches in diameter and the latter 3 inches, and to keep them in place by an iron bolt run through them and through the extremities of the sides of the frame. The sling is made with a loop at each end through which the rail passes.

By simply lengthening the rails the chair may be converted into a settee, but each settee should not be made to hold more than three persons, *i.e.*, about 6 feet wide, as the strain on the top rail will cause it to bend.

Excellent and comfortable settees with spring seats are made by the various makers of woven wire mattresses. They are, however, rather expensive, and they have the disadvantage that contact with urine causes the wires to rust very rapidly away.

Very comfortable and strong settees may be made with wooden splines after the fashion of garden seats. The backs and seats should of course be suitably curved.

Whatever settees or easy chairs are adopted, they should be furnished with plenty of cushions, which may be most inexpensively made in the asylum itself. They can be made of old bed ticks stuffed with rags that have been torn into charpie by destructive patients, or with newspapers cut small and rolled as described in the chapter on *Occupation*. They can be covered with fragments of worn-out dresses, carpets, or curtains. They will, of course, be more durable if a mackintosh cover is interposed beneath the outer covering. The provision of abundance of cushions for the backs and seats of the settees and chairs is a matter of no small moment to the comfort of aged people, and should be attended to in every ward.

Screens.—The provision of screens has already been recommended for the purpose of securing some attempt at privacy for those patients who suffer for the want of it; but the subject may be again mentioned here, for even in wards less gigantic than those, for instance, in the asylums constructed by the Metropolitan Asylums Board, a provision of the kind would be highly cherished by very many patients, and the cost need be very little. The framework of the screens could be made in the workshops of the asylum, they could be covered with scrim or canvas or old sacks, and could then have pictures from the illustrated papers pasted all over them as a finish.

The Bookcase.—In every ward there should be a bookcase furnished with books. Whether or no the bookcase should be locked would depend on the character of the patients and of the attendants also. In some asylum wards it is found quite practicable to have the bookcases open to the patients to take the books as they please; in others it is impracticable. A portion of the bookcase should, however, be enclosed and furnished with a lock, so that the attendant may secure such games as chess and draughts, which need a number of pieces to be kept in their integrity.

The Newspaper Stand.—In addition to a bookcase there should be in every ward one or more newspaper stands in which the daily paper may be secured from appropriation by a single patient and kept available to all. The stands should either be secured to the wall, to which they may be attached by a hinge so as to fasten back when out of use, or made in some other way secure against being knocked over by a turbulent patient. They must, of course, to hold an open newspaper, be large, and to be of any duration must be substantial, and hence must of course be heavy; and the fall of one of them against a patient might inflict serious injury.

The Letter-box.—Every ward should contain a letter-box in which the patients can post their own letters, and this box should be cleared daily at a regular hour.

The Piano.—Every ward should also contain a piano; and now that American organs are to be had at such inexpensive rates, a few of them also might with advantage be placed in asylum wards.

The Decorations.—In addition to the furniture already enumerated, there should be a good stock of decorations. Plenty of pictures on the walls. Excellent oleographs and chromo-lithographs may now be obtained at most reasonable rates, and can be framed cheaply and well in the asylum workshop. The frames should be substantial, and suitable to the size of the picture. Nothing looks more beggarly than a 30 by 20 inch picture in a frame of 1 inch beading. Since the pictures are to be permanent decorations to the asylum wards, and to remain for years, the trifling expense involved in buying 3 inch moulding in the place of 1 inch is not to be considered. The coloured prints issued with the extra numbers of the illustrated papers are much used in asylums. They should be pasted on canvas or scrim properly stretched on a frame, when they will not only look far better but last far longer than if mounted in a more amateurish manner. A recipe for bookbinders' paste suitable for this purpose will be found given later in the chapter devoted to the *Chaplain*.

Brackets on which may stand plaster casts of statuettes, busts, &c., should also be provided. These casts may be obtained cheaply from

Messrs. Brucciani, Russell Street, Covent Garden. Over the bracket on the wall behind the east may be draped a dark coloured cloth of a tint harmonising with the walls, which will add greatly to the effect; or, if this cannot be done, a niche may be painted on the wall.

The Flowers and Plants.—Plenty of flowers should be issued to the wards, and changed from time to time by the gardeners. The gardener should visit each ward once a week for the purpose of attending to his plants and changing such as are suffering. Some of these plants may be on the window sills, some on flower stands, and some again in hanging baskets. The wire globes with which gas lights used to be protected, heaps of which are to be found discarded in some asylums, make excellent hanging baskets.

Aquaria form ornaments which are often of interest to patients, and scarcely any ward should be without its **aviary** of singing-birds, which are a perpetual source of pleasure to both patients and attendants.

The Medicine and other Cupboards.—This is the place to mention the medicine cupboard, one of which should be attached to every ward. It should not, however, be actually in the ward, but in the room of an attendant opening out of the ward: it has then the additional security of a second lock. In every medicine cupboard should be a probang, so that it may be immediately at hand in case of a patient choking.

In addition to the medicine cupboard, there should be in every ward another cupboard for things which must be kept from the patients—for the knife box, dusters and dusting brushes, furniture polish, a kettle, a teapot, things given by the patients to the attendants for safe keeping, any little stores of the attendants' own, &c. &c.

B. DORMITORIES.

Dormitories in asylums are of three kinds:—

- (1.) Single rooms.
- (2.) Associated dormitories ordinary.
- (3.) Associated dormitories for special supervision.

Dormitories for special supervision should never contain more than thirty beds, these being as many as can be properly supervised by one attendant. It were much to be wished that no dormitory, whether for supervision or no, should contain more than this number of beds; but on the scale that asylums are now built, this must, I fear, remain a pious aspiration.

Dormitories should have windows on both sides to secure thorough ventilation, and the windows should reach up to very near the ceiling, or else there should be one or more air shafts opening directly from the

ceiling into a shaft terminated by a louvred lantern. If there is no such shaft, and if the windows do not reach to within, say, 18 inches of the top of the ward, there will be a mass of air of a foot in thickness near the ceiling which will be of little or no service for the purpose of ventilation or dilution of the common air of the room. Of course, if the windows are made as advocated in this book, with the upper part to open as a sheringham valve, this objection does not apply.

No dormitory should contain more than two rows of beds.

No dormitory should be less than 18 or more than 21 feet wide, inside measurement.

Beds should be at least 3 feet apart from side to side, and 6 feet from foot to foot. These minimum dimensions will give a superficial area of 54 feet to each patient, and in a dormitory 12 feet high, a cubic content of 648 feet *per caput*.

Dormitories should be heated by the means described on p. 14, or by hot water or steam coils, with which should be associated free openings into the outside air at the floor level.

Beds.—The bedstead should in all cases be of iron, and for this sufficient reason if for no other, that it is extremely difficult entirely to prevent an invasion of bugs into the dormitories, and that, if wooden bedsteads be employed, the bugs will effect therein a permanent lodgment, and no effort to dislodge them will be successful until the beds have been removed. Wooden bedsteads are also absorptive of urine, and inappropriate for use among patients, any of whom is likely to become wet and dirty without warning. Bedsteads should be 6 feet long by 3 feet, or not less than 2 feet 9 inches, wide. The framework should be of iron tubing not less than 1 inch outside diameter. The head and foot should have no projecting knobs, but have plain rounded corners. The interior of the frame formed by the head of the bed should be filled in with sheet iron let into a slit in the iron tubing. The reason for this and for the absence of knobs and projections, is the fact that several suicides have been effected by hanging from these portions of a bedstead; and the precautions here given are necessary to render it impossible to attach a noose of any kind at a sufficient height above the floor to render hanging practicable. It would seem that unless the legs of the bedsteads are kept unusually short, there still remains opportunity for a patient to attach a loop to any portion of the horizontal framework of the bedstead, and by lying down and resting the throat on the loop thus formed, strangulation might still be effected. There is, however, no case on record in which this method has been tried, while there are several in which attempts have been made, and have been successful, by utilising other portions of the bedstead.

Woven Wire Mattresses.—The general consensus of opinion at

the present day seems to be in favour of the woven wire mattress as a support for the bed, and there is no doubt that it offers great advantages over anything hitherto used. It is cleanly, it is no trouble to fit up; once fitted, it remains permanently in place. It affords no harbour to vermin. It is elastic and very comfortable, and it allows of a slighter make of hair mattress being used. In all these respects it compares advantageously with wooden laths and iron slats. It has, however, the disadvantage that it rapidly rusts away when wetted with urine, and is therefore not very suitable for the beds of wet cases.

Where the woven wire mattress is used care must be taken that the hair mattress that is placed on it is made 1 inch wider than the wire, so as to project $\frac{1}{2}$ inch beyond it on each side. The reason for this is, that the wire mattress is slightly narrower than the iron frame of the bed, and consequently, if the hair mattress is not made wide enough to project beyond this framework, the patient will be in imminent danger of barking his shins every time he gets into bed, and, in the common case of a fall against the bedstead, of even graver injuries.

The wire should be not less than No. 17 B.W.G., and should be tinned, coppered, or galvanised, the last being best.

Bed Feet.—The ordinary castor, with wood or earthenware rollers, should never be used. The majority of the beds will have no rollers. In the infirmary, where castors may be advisable, they should be large and strong, not less than 2 inches in diameter, the spindle $\frac{1}{4}$ inch thick. The ordinary castors very soon become unserviceable. Often the roller ceases to revolve, in which case it is, as a castor, useless. Soon the fixed roller gets worn down so as to rest on the floor as a flat surface with sharp edges. If the roller continues to revolve, the hole in which it turns on the spindle wears till it is too large for the spindle, and the roller splits or breaks. In any case, either the horns of the roller come to the ground, scratch the floors and tear the carpets, or the central peg on which the horns revolve comes to the ground and performs the same service.

Some patients will lift their bedsteads and pound the floors with them at night. Such patients must have bedsteads that will screw down to the floor. Each foot of the bed ends, not in a foot or a castor, but in a circular flange 1 inch wide, in which are drilled three holes through which are passed the screws: 1 inch screws are sufficient. A more recent plan is to have the leg of the bedstead locked to the floor, so that it can readily be unlocked and moved when needed.

Special Forms of Bedstead.—For those epileptics who roll out of bed in their fits, special bedsteads are provided, with legs not more than 7 inches high; so that, if they fall, they cannot fall far. Moreover, if they are very feeble, injury can be still further prevented by laying a

mattress on the floor inside the bed. Patients' beds should not, however, be made up on the floor without the intervention of any bedstead. Such beds are neither so comfortable nor so healthy as those on bedsteads, and, moreover, they habituate patients to habits of untidiness, and to ways that are exceptional and abnormal.

For general paralytics, and patients who are apt to fall against their bedsteads and injure themselves, a bedstead is made by Messrs. Billington, Cambridge Street, Liverpool, which has raised sides made of a length woven wire, doubled so that the fold is upward and forms the free edge. The sides are only about 6 inches high, so that they would not prevent a patient from getting out of bed, but their yielding nature would save him from injury in case of a fall against them. This appears to be a very useful device, but its value was lessened on the specimen seen, from the body of the bedstead being of wood, and the head and foot of the bed being also of wood.

Mattresses.—Mattresses should be of ordinary ticking, 3 inches wider than the beds, and, with woven wire mattresses beneath them, may be $3\frac{1}{2}$ or even 3 inches thick, instead of the $4\frac{1}{2}$ inches that are usual and necessary with old-fashioned beds. It is of course an advantage for the mattresses to be thus thinner, for in the first place it saves material and therefore cost, and in the second it enables the mattress to be more easily folded. Flock, wool, and coir fibre are sometimes used for stuffing, but all these get in time lumpy and very uncomfortable, and apt to produce bedsores. They have, it is true, the advantage of cheapness, by reason of which they can, when soiled, be destroyed outright, but hair on the other hand is capable of being cleaned and used again, so that if its first cost is greater, its life is much longer. For patients of dirty habits a good plan is to have the mattresses made in three distinct sections. The middle one when soiled can be removed, while the unsoiled ends remain.

For wet patients the mattress should be partly or wholly covered with mackintosh. Those who flood themselves every night should have the mattress completely enveloped in a casing of mackintosh which can be taken off and replaced by a fresh one. Those who are less faulty in habits will need a three-quarter or half-length of mackintosh in the middle of the bed. In any case the mackintosh should of course be removable, but should be attached to the mattress. Thus attached, it will be impossible for attendants to put it on above the under blanket, a custom which is very common, and gives great discomfort to the patient who sleeps on it.

Pillows.—Pillows should be not less than 20 inches wide and 7 lb. in weight. This is an unusual weight for pillows, but then it must be remembered that, in asylums, bolsters are not used, and the pillow has to be pillow and bolster in one.

Blankets.—The under blanket need not be very substantial in substance. A very good under blanket may be made of thick house flannel. It should be all wool, and no bed should be without an under blanket.

Upper blankets should in no case be coloured. The merit claimed for coloured blankets is that they do not show the dirt, but this is of course really a defect, since it will lead to blankets being left on the beds long after they ought to have been in the wash. Blankets should be of fine wool, no shoddy being employed, and no stoving. They should be $2\frac{1}{4}$ yards long by $1\frac{3}{4}$ wide, and not less than three should be allowed for each bed.

Quilts.—The quilts should be uniform in each ward, but should vary in colour and pattern in different wards. The ordinary alhambra quilt does well, as do worsted counterpanes for winter use.

Chamber Utensils.—Chamber utensils should be of plain white earthenware, and without handles. A lighter pattern is usually supplied for the male side. For single rooms and for violent patients a guttapereha utensil is used, and is efficient, though apt to smell. Those made of papier-maché are on the whole better. They are less expensive, and therefore more often renewed, though less durable.

Mirrors.—Mirrors should be plentiful, especially on the female side. Nothing conduces more to the self-respect of women than the ability to make themselves tidy, and to judge of the result of their efforts by the aid of the mirror. To place a single mirror in a dormitory containing twenty or thirty or more patients is a mockery, and leads to daily strife, bickering, and even violence—a very bad beginning for the day. The mirrors need not be large—15 inches by 10 inches is large enough—but they should be plentiful. They should of course be fixed to the walls by screws, and not merely hung upon nails. Care should be taken not to fix them too high. Men in fixing them are apt to adapt the mirrors to their own height, forgetting that the average height of women is 5 inches less. In women's wards the lower edge of the glass should be not more than 4 feet 3 inches from the ground; in men's wards 4 feet 8 inches.

Brushes and Combs.—Hair brushes should be small, not more than 4 inches in the length of the bristle portion, and not more than 4 inches in the length of the handle. Heavy brushes are formidable weapons. The bristles should be white, so as to show the dirt readily, short and strong. Male patients can have brushes without handles, which are less readily used for weapons. Women do not readily brush their hair with these handleless brushes.

Ordinary combs should be of horn. They have the disadvantage of swelling and getting out of shape when wetted, but are more durable

than vulcanite, which break to pieces at once. Small tooth combs should be of bone, the horn not being sharp enough to penetrate the hair, and clean the head.

Lockers.—A locker at each bedside to hold the clothes is in rare instances provided. It is a great help to neatness, but it is not to be expected in large asylums, in which the expense would be great ; and it is open to the great disadvantage that the lock is apt to get out of order and leave the whole of the patients in the dormitory free access to the clothes.

Screens.—Every dormitory should contain one or two screens to put round the bed of a patient who may have to be visited at night by the doctor, or for whom privacy may be for other reasons desirable.

SUPERVISION DORMITORIES

for patients who are actively suicidal, or are liable to epileptic fits at night, should be provided as a matter of course in every asylum. In no case should they contain more than thirty beds. This is as large a number of patients as any one attendant can effectively supervise, and to put two attendants into one ward at night is less likely to be an efficient arrangement even than giving too many patients to one. The attendant should be provided with a comfortable revolving chair, elevated on a dais, so as to give a good view over the whole of the ward, and with a small desk in front, whereon to make notes of noteworthy occurrences. The position of the attendant should be so chosen as to command the fullest view over the ward, to be the shortest practicable distance from each patient, and to have no patient behind him. In a ward of ordinary shape, that is to say, oblong, it is evident that the position of the dais should be in the middle of one side, and against the wall. The attendant in charge of an observation dormitory should not be required nor allowed to leave the dormitory while on duty ; he should not therefore have the supervision of patients in single rooms opening out of the dormitory. The seat of the attendant should be so placed as to command a view of the closet, the door of which should, as stated in another section, be at least a foot from the floor.

SINGLE ROOMS.

The proportion of single rooms to patients must necessarily vary very much with the character of the patients in the asylum. On this subject see p. 7.

Size.—Single rooms should not be all of the same size. Those which are occupied by night only need not be larger than 6 feet by 10 feet.

Those which are occupied both night and day should not be smaller than 10 feet by 10 feet.

The beds in single rooms present no special feature, save that in some rooms it is necessary to have them fastened to the floor as already described.

Doors of single rooms, of course, open outwards.

The chief point of weakness in the construction of single rooms is the window. The form of the window already described is unsuitable for single rooms on account of the necessity of having it closed whenever the shutter is in use. It is necessary, therefore, to adopt for them the ordinary stopped sash window, which is practically quite safe.

Shutters.—Unlike other windows in asylums, the windows of single rooms should be furnished with a shutter, and this must not be a sliding shutter, but must be hung on side hinges like a door, and when not in use must shut back flat against the wall into a frame, in which it is secured by a lock. The lower half of this shutter must be of wood, solid and substantial, not less than 1 inch in thickness, of boards tongued and grooved together, and not panelled. The upper half must be so arranged as to have apertures for light and ventilation, and the character of these apertures is a matter of importance, for when improperly constructed they have often been used as a means to suicide. The apertures often seen are either circular holes bored by a centre-bit, through which the patient inserts the handle of a fork or spoon and hangs himself thereto. Or there is an aperture about 6 inches square guarded by horizontal or vertical rods of iron about an inch apart. The patient tears his clothing into strips, ties the strips to these bars, and suspends himself from them. The proper way is to have the upper half of the shutter either entirely open, or divided into two or four openings by horizontal or transverse styles according to the size of the window. This opening is then covered by a single sheet of stout wire gauze, the wire of 16 or 17 B.W.G., and the interstices not more than $\frac{1}{8}$ inch. This is to be fastened to the *inner* surface of the shutter. If fastened to the outer surface the effect of the patient hammering at it when closed will be to force out the staples and loosen the gauze. If to the inner surface, blows delivered from this side will have no such effect, while blows from the other side can be delivered only when the shutter is open and therefore lying flat against the wall, which supports the gauze and prevents injury. The staples should be $\frac{3}{4}$ inch in length and not more than 4 inches apart. The edges of the gauze should be fastened down to the shutter by beads screwed to the shutter.

Where ventilation is otherwise provided for, and it is unnecessary to have apertures in the shutter for this purpose, an excellent method of admitting light freely, while at the same time guarding against the

possibility of breakage, is to form panels in the shutter, and to fill these panels with the translucent wire weave material made by the Wire Wove Roofing Company, of Queen Victoria Street. This material, while not transparent, is translucent, and transmits a very fair proportion of light; at the same time it is so strong as to be quite unbreakable by the unaided hand. It is of great value for insertion into the shutters of strong rooms, especially for those used for destructive patients during their outbreaks.

The lock of the shutter should not be one which can be opened by a railway key, which is also negotiable by a piece of stick or a broken fork handle. It should be similar to the locks of the ward doors.

Single rooms should have strips of carpet laid by the side of the bed in the daytime, and removed at night.

Ventilation and Lighting.—The ventilation of single rooms is usually very imperfect, and this, on account of the objectionable habits of most of the inmates, is an important matter. Since the door is nearly always opposite to the window, a simple and efficient means of ventilation would be to shorten the door so as to leave an interval of 2 inches or so between it and the floor. The objections to this plan are that if the patient were out of bed the draught would be very cold to his feet, and that the air supplied would be that already utilised in the ward. The only other method is to have air channels built into the walls or running under the floor, and opening by sufficient and carefully guarded apertures at a height of 2 or 3 feet from the floor in that wall against which the bed is not placed. These openings should not be less in the aggregate than 48 square inches.

Single rooms are usually lit by a gas-jet placed in an aperture in the inner wall over the door. If this aperture be closed with glass on the side towards the ward, and left open on the inner side towards the single room, and if a proper ventilating shaft be placed over the gas-jet to receive the products of combustion therefrom, this ventilating shaft will act as an efficient exhaust shaft so long as the gas is lit, and with the fresh air apertures already described will keep the air circulating through the room, and form a fairly efficient ventilator. Of course, it is presumed that the ceiling is not less than 12 feet high. The extraction shaft of one single room should be placed in contact with the vertical portion of the inlet shaft of the room above, thus warming to some extent the air admitted.

Single rooms must be artificially heated for the protection from cold of those patients who denude themselves of clothing at night. The artificial heat will be supplied by means of coils of water or steam according to the use of the asylum, will communicate with fresh air inlets, so that warmed fresh air may be freely admitted into the room, and must of

course be efficiently guarded so that the patient cannot injure himself either by design or accident. To guard against wilful injury, the coil, whether enclosed within the thickness of the wall, or, better, standing as a projection into the room, must be surrounded by a skeleton framework of wood, to which are attached panels of the stout wire gauze already described. To guard against accidental injury by the patient falling against the coil-box, it must be covered on the top by a substantial pad well stuffed, and with edges projecting not less than 1 inch beyond the edge of the wooden framework. The pad will, of course, be covered by waterproof material, and will be fixed in its place by screws.

It is usual to leave single rooms wholly bare and destitute of decoration of every kind, and doubtless their ornamentation may appropriately be postponed to that of the more conspicuous portions of the asylum, but there is no reason why it should be neglected altogether. Pictures cannot, of course, be hung in single rooms; but paper pictures may be pasted on to the walls when the latter are painted, and when dry may be varnished over. Quasi-frames of coloured paper may be cut out and pasted round them, and the effect, if somewhat crude, will at any rate be better than total bareness. Care should be taken to size the pictures before varnishing them.

The doors of single rooms should of course, as previously stated, open outwards, and a certain proportion of these rooms should have double doors to deaden the sound of hammering by noisy patients. Between the double doors should be indiarubber blocks. All doors of single rooms should be fitted with silent action locks with handles outside, so that the doors can be opened at night for the purpose of inspection without disturbing the patients. These locks should be so constructed that when opened with a key the handle is put out of action and the bolt is held back, so preventing an attendant from being shut into the room, which has, of course, no handle or keyhole inside.

Rooms with double doors should have the inner door fitted with a lock which can be opened by a flush release operated from the inside as well as by a key from the outside. By this means a patient may seclude himself in privacy from other patients, while still having the power to leave his room at pleasure, and while still being accessible to the attendants.

For the purpose of inspection, a narrow slit of window 3 inches wide and 3 feet high on the inside, where it is glazed with plate glass, and with bevelled sides opening to 1 foot on the outside face of the wall, are better than inspection holes in the doors, the use of which is apt to be resented by patients. A gas jet can be fixed at the top of the window.

PADDED ROOMS.

It is commonly supposed that the object of padding the walls of a room is to prevent an excessively maniacal patient from injuring himself by the wildness of his gesticulations, or to prevent a suicidal patient from accomplishing his purpose by dashing his head against the wall. Both classes of cases are so extremely rare that the provision of a single padded room would be sufficient to meet the want of even the largest asylum in their treatment. Without denying the occasional occurrence of a case in which self-injury must be prevented by the employment of a padded room, it is certain that by far the most frequent and important use of the padded room is to save those who are both feeble and restless from injuring themselves in the numerous falls to which they are liable. For this purpose it is quite unnecessary to pad the walls of a room to a height of 6 and even of 8 feet, as is often done.

To meet the first class of cases a height of 6 feet is ample, and a single room padded to this height is all that is needed on each side of the asylum. The other padded rooms need be padded to a height of 4 feet 6 inches only, which is quite enough to protect a patient from injury in falling against the wall.

The pads, to be efficient, should be soft and thick, not less than 4 inches, and as the room will be thus diminished in both length and breadth by 8 inches, it should be sufficiently large to start with, and the smallest size of single room should not be padded. The best covering material for pads is rubber-covered cloth, but as none but the very best is of any use, and as the best is very expensive, other materials are sometimes used, though they are less appropriate. Of such materials leather is the most often used, and answers fairly well. Canvas, which is sometimes employed, is, from its permeability to urine and other slops, very unsuitable, but canvas which has been waterproofed by the Willesden process might probably be found very suitable. Whatever material is used, the pads on the floor will become in time offensive from the soaking of urine, &c., into the cracks between them. They should therefore be taken up periodically, to be cleaned and sweetened. Padded rooms should always be well ventilated and efficiently heated, for they are used for the reception of a class of patients who are usually offensive in their habits and always of low vitality.

BATH-ROOMS AND BATHS.

In large asylums it is usual to have a general bath-room containing ten or twelve baths, in which this number of patients can be bathed simultaneously. This arrangement is useful, and indeed necessary,

where very large numbers of patients have to be dealt with; but it does not do away with the necessity of having a bath adjoining every day-room and dormitory. For occasions constantly arise, both night and day, necessitating the immediate bathing of dirty patients. The drawbacks to the general bath-room are that it is usually at some distance from the dormitories, and patients cannot therefore be taken straight from the bath to their bed, but must be fully dressed in order to leave the bath; and, as they are very often insufficiently dried, this is a fertile source of colds and of graver maladies. In no case should a bath-room be so separated from the main building that access cannot be obtained to it without going through the open air.

Bath-rooms connected with the ward should, where possible, be placed between day-rooms and dormitories, and should communicate with both. Patients can then be prepared for the bath in the day-room, and issue from it into the dormitory; and there is no disorderly mingling of bathed and unbathed patients.

In the general bath-room the baths should be not less than 3 feet 6 inches apart, and should be separated by screens or by curtains hung on rods at least 7 feet high, and these curtains or screens should be close to one side of the bath, leaving a space of at least 3 feet between them and the adjoining bath. Where the baths are in two rows, a space of at least 5 feet should be between the rows.

A room containing a single bath should be large enough to give a space at least 3 feet wide on each side of the bath.

No bath should be placed with its side against the wall, for with feeble patients it is necessary to have an attendant on each side. It is well also not to have even the end of the bath in contact with the wall, but to stand it out in the room so that attendants may go quite round it. Baths should never be sunk into the floor. Such an arrangement not only renders access to the waste for repairs, &c., difficult, but places attendants at a great disadvantage with unruly patients.

The best size of bath is, length 5 feet 6 inches at top, 4 feet 6 inches at bottom, width 2 feet 6 inches, depth 2 feet 3 inches.

The best material for baths is earthenware. Metal baths are not to be recommended. If of enamelled iron, the enamel in time scales off, owing to the expansion and contraction of the iron under the varying temperature. If of japanned iron or zinc, the japan in time wears off. In either case the bath becomes not only unsightly, but difficult to keep clean. Copper is too expensive, and the only material remaining is earthenware. Rufford's baths are recommended by the Commissioners in Lunacy, but their weight is so enormous that they are unsuitable for upper floors.

The waste pipe should be 3 inches in diameter. This size, which

for an ordinary domestic bath will appear excessive, is necessary in asylums, where quickness of emptying is important. Unless this is provided for, not only will there be waste of time, but there will be temptation to the attendants to bathe more than one patient in the same water. The plug of the waste should be of solid rubber.

The supply valves should be $1\frac{1}{2}$ inch, should be incapable of being used except with a key, and should be of a pattern which compels the user to turn on the cold water first.

The supply should of course not enter at the bottom of the bath by a pipe common to it and the waste, this arrangement being objectionable not only because it provides for the return of a certain portion of dirty water when the supply is turned on, but also because if the waste is left on, the supply may also be left on without water entering the bath, and therefore without the knowledge of the user, and great waste of water may be the result. In order to obviate the excessive escape of steam, the supply valves are sometimes made to open 6 inches above the bottom of the bath, but if the cold water is always turned on first, there is the less need to provide against this event; and the supply valves may be placed as is usual at the top of the bath.

It is better that baths should not be cased in, as they are then more accessible for cleaning, and there are fewer enclosed spaces for the accumulation of dirt, but the supply pipes must of course be encased with wood casing. All casing that is used should be readily removable for inspecting and cleaning the interior.

Mats or wooden lattices should be provided at the sides of the baths for the patients to stand on when getting out of the bath. Wooden lattices are best, and should be made of narrow splines with small interstices to obviate danger of patients catching their toes and hurting their feet, or tripping and falling. Three feet by two feet will be large enough for the lattice. Splines $1\frac{1}{2}$ inches in breadth, 1 inch thick, and $\frac{1}{2}$ inch apart. It is better for these lattices to be raised off the ground by cross pieces on their under sides. They then last much longer.

For every hundred patients six baths are required.

Capacious baskets should be provided to receive the soiled towels. In general bath-rooms, in which the number bathed at once is large, and the number of towels used is correspondingly large, baskets on wheels should be provided, in which the soiled towels can be placed, and in which they can be wheeled straight to the laundry.

Bath-rooms should be well ventilated by air gratings opening on to hot water coils, as inlets; and the top portion of the windows previously described as outlets. Care should be taken that the means of heating the room is efficient.

URINALS.

Urinals should always be provided on the male side in asylums, in order both to relieve the crowding to the closets, and to avoid the uncleanness of using closets as urinals.

Four stalls will be sufficient for a hundred patients.

The floors and walls of urinals should always be tiled.

The sides should be of enamelled slate or stoneware.

There should be no pan raised above the floor, but a simple gutter to carry off the slops.

The urinal should be capable of being flushed with *hot* water occasionally, in addition to an automatic flush acting by syphon every five or ten minutes.

WATER-CLOSETS.

In few asylums is the provision of water-closets sufficient for the population; and the insufficiency leads to constant squabbling and contention among the patients. The proportion of closet seats to patients should not be fewer than one to twelve.

Position.—It is an accepted axiom of sanitation that closets should always be placed against an outside wall, so that the soil pipe can be taken immediately from the closet trap through the wall to the outside of the building, where it is at once ventilated, and thus, with an efficient trap, all possibility of sewer-gas contamination of the air of the building through the closets becomes impossible.

In hospitals, the accepted arrangements for closets is to have them placed in small spurs built out from the wards, these spurs having narrow necks with windows on each side, so as to admit of cross ventilation between the closet and the ward. This arrangement is not, however, suitable for asylums. In the first place, from a sanitary point of view it is not unimpugnable, for a current of air often sets from the cold closet to the warm ward. In the second place, this disposition of closets places formidable obstacles in the way of the proper supervision of patients in the closets, a matter of great importance, since as these are the only places to which the patients can retreat in solitude, they are chosen more often than any other localities for suicidal purposes. If, therefore, the water-closet blocks are built out as spurs from the main building, they must be connected therewith not by a narrow neck, but by an opening the full width of the spur.

The seats of the closets should be placed side by side, should face the entrance to the ward, and should be separated from each other by partitions. In some asylums there is a beastly practice of placing the seats

facing one another with no partitions between. The partitions need not reach to the ceiling—in fact, they are better when only 5 feet 6 inches to 6 feet 6 inches in height. The compartments should be 3 feet in width. The doors should open outwards; should shut by a torsion spring; should have no fastening, and should not reach the ground by 1 foot. By leaving an interval of 1 foot open below the door, it can always be seen whether the closet is tenanted or no, while the occupant is decently concealed. Over the doors the partitions should be carried up to the ceiling, or else there should be nothing whatever over the door; otherwise a transverse bar is left which is very suggestive for suspensory purposes. The water-closet lobby should be separated from the ward by swing doors with glass panels. In this way, while completely separated from the ward, and not offensively or prominently brought under the notice of casual passers-by, the closets and their inmates would always be under the supervision of the attendants, without any necessity for the latter to quit the ward for the purpose.

Separate closets with torsion spring doors and spring locks should be provided for the attendants.

Floor and Walls.—Closets should have tiled floors, especially when closets with lifting seats are used. When the closets are used as urinals, and for the disposal of slops, as they often are, and as the wash-out closets may be without objection, the floors, if of wood, are apt to get saturated and to become offensive. Hence the necessity for tiles. The walls also should be of tiles, which should be glazed and of plain colour—white or ivory.

Form.—The question of the pattern of closets in lunatic asylums has long been a burning one. Closets at the best are apt to be unsatisfactory appliances, and in asylums, where the habits of the patients render them liable to so many additional causes of derangement, they very frequently get out of order.

Water-closets are practically of five forms: the long hopper, the pan, the valve, the wash-out, and the short hopper or wash-down. The first two forms may at once be put on one side. They ought not to be found outside of antiquarian museums. The valve closet is quite unfitted for use in lunatic asylums, since it carries within itself the elements of its own derangement. Every apparatus which depends on valves for its efficiency requires constant attention to maintain it in working order, and in the case of a valve closet this is true in an unusual degree. The valve is faced with rubber, which is a short-lived material at best, and which is rapidly acted on and deteriorated by the soil and the gases of the closet. Long before the life of the valve comes to its natural end it is often rendered inefficient from the most trivial causes. A match is thrown into the pan, is caught by the valve and held between the rubber and

the seating for some hours. The consequence is that the rubber retains a dent or groove where the match pressed upon it, and through the pipe formed by this groove with the seat of the valve, the water in the pan trickles away. Thus the pan is left empty and the seal destroyed. Not only is the valve closet very easily disordered, but it is a complicated and difficult affair to repair, and hence is quite inappropriate for the rough usage to which it is subjected in asylums.

The only closets that remain are the wash-out and the wash-down, both of which have the great advantage of being without valves or moving parts, and hence have positively no working mechanism to get out of order. Moreover, in consequence of this mode of construction they need not be boxed in, but can be, and usually are, made to stand free and alone, so that the whole area round them can be cleaned, and there is no enclosed space in which filth can lodge secure from observation, and no need for any so-called "safe" or leaden tray beneath the pan. They have, too, the great additional advantage that the wooden seat can be hinged so as to be lifted completely away from the basin, and thus the closet can be used as a slop sink or urinal without the possibility of fouling the seat. A further improvement is the provision of a counterpoise, by which the seat is kept automatically raised at all times except when actually in use. This form of seat is not, however, so suitable for epileptics and demented as the old form, in which the seat is carried to the wall on each side of the pan. In wards devoted to these classes of patients the old form of seat could be provided.

The only drawback to the use of these closets is that they usually require a good deal of alteration of existing soil-pipes to put them to closets in which other forms have been previously used, and that they require for the most part more skill in fitting up than other forms of closet. The first objection is now being removed by the construction of closet pans specially adapted to be fitted to soil-pipes left by the removal of pan closets; and the second is scarcely worth noting.

Of the two forms of valveless closet, the short hopper or wash-down is on the whole preferable. The wash-out closets have a somewhat more sightly appearance, but the arrangement for keeping an adequate quantity of water in the basin is one of some nicety, and is apt to be disordered. No such disadvantage attaches to the wash-down closet, which is the one that is on the whole to be preferred.

The points to be attended to in choosing a closet are as follows:—

1. It should be strong. Those made of thick fire-clay are the strongest.
2. It should be trapped above the floor line.
3. The back should neither slope forwards nor be perpendicular. It should have a slight backward slope.

4. Inspection openings with screw covers should be provided, whereby every part of the closet can be inspected and cleaned.

5. The flush must completely sweep out the whole contents of the basin.

6. The basin must hold sufficient water to prevent the soil adhering to its surface. For this purpose the *area* of water should be large. This is the point at which wash-down closets are most apt to fail. Wash-out closets, on the other hand, usually fail in the matter of depth of water.

Water Waste Preventers.—A necessary adjunct to a valveless closet is a water waste preventing cistern, of which again there are many good forms in the market. These may all be reduced to two—those which depend on valves, and those which depend on syphons for their efficiency. Of those the latter have the great advantages that they are less liable to get out of order, and then the amount of water discharged is a fixed quantity, and does not depend on the strength of the pull or the time that the pull is maintained on the handle, defects from which the forms fitted with valves all of them suffer. Syphon cisterns are also made in several patterns to discharge automatically at fixed intervals, without the intervention of any pull or provocation of any kind. These are less necessary for closets, which are not in use all day long, but are very useful and indeed almost essential for urinals. If fitted to closets they should certainly be turned off at night in order to prevent waste of water. Whatever form of waste preventer is used should possess the following essentials:—1. The cistern must be of cast-iron galvanised. The cheap cisterns of sheet iron riveted and galvanised are not durable. After being in use a year or two, white specks will appear on the outside surface of the cistern, at or near the bottom. If the inside of the cistern be examined, there will be found at the points corresponding with these white specks fungating masses of rust as big as a walnut. In course of time the specks on the outside and the rust on the inside increase in size, until at length the substance of the iron is eaten through, and the cistern leaks so as to become useless. 2. The mechanism must be such that no regulated strength of pull is required to discharge the cistern. Some cisterns will discharge only with a strong pull; others only if the handle is pulled and held for a moment or two; others must be pulled a certain distance. These are all very well for use in a private household by a small number of intelligent persons who can be trusted to use them precisely in the manner they need; but they are quite unsuitable for the rough and unintelligent inmates of an asylum. 3. The flush of water at each discharge must be sufficient to completely empty the contents of the basin, that is to say, not less than two gallons. 4. For wash-out closets efficient provision must be made for an after flush, so that the basin may be left with a sufficient quantity of water in it.

It is almost unnecessary to say that whatever waste preventer is fitted, the chain which usually dangles from the lever for the purpose of setting it in action should be removed, and for it should be substituted a rod of stout wire which should be protected by a casing of wood, thus removing an obvious temptation to suicide. Automatic flushing arrangements actuated by the seat or the door should not be used. They are in the first place constantly out of order; and in the second, the principle of their employment is wrong. Our object is not to treat insane patients as reasonless animals, but to give them opportunity for the exercise of their faculties, and to encourage and urge them to give these faculties employment. If everything is to be done for them by automatic machinery, they will not recover their faculties by exercising them.

LAVATORIES.

The daily lavations of the patients are conducted, not in movable basins placed in the dormitories, but in properly fitted lavatories adjoining; this plan being obviously far more convenient than the former, which is suitable to private residences only.

Basins.—Lavatory basins should be provided in the proportion of one to every four patients.

A method sometimes employed is a long shallow trough without divisions, in which a number of patients wash simultaneously in the same water. When it is remembered how different insane persons are in their habits, how dirty are some and how scrupulously clean are others, it will be recognised how very inappropriate this plan is for use in an asylum. The basins should be separate, and should be a sufficient distance apart to allow of the patients conducting their ablutions without interfering with each other, that is to say, not less than 20 inches from centre to centre. The basins should be of strong thick stoneware, not less than 1 inch in thickness. They should be supplied with both hot and cold water by means of spring valves substantially made of gun-metal. The ordinary spring valve which is actuated by pressure on a knob is of little use, as it is soon disordered. A better form is that which is actuated by a short lever. The plug for the waste pipe should never be attached by a chain, which is usually broken in the first day's use, but should be in the form of a gun-metal valve, lifted by a ring, and retained in its raised position by a quarter turn on its vertical axis. The pipe supplying hot water to the whole of the basins in each range should be fitted with a valve accessible to the attendants only, by which the hot water supply to all the basins can be cut off, so that in case of a demented patient straying into the lavatory alone, he cannot scald himself. All pipes should be led into the basins from

below, and the basins should stand on skeleton frames of iron, and in no case should the space below the basins be encased. It should be left freely open for inspection, or it will become a receptacle for foul rags, soiled bed linen, and rubbish and filth of all kinds. Every waste-pipe should be separately trapped before discharging into the common waste, and the common waste should have a sufficient fall to remain empty, and should be trapped before entering the drain. For this and all other pipes the anti-D trap is, on the whole, the best.

Towels.—Towel rollers should be fitted in lavatories, roller towels being most frequently used therein. The supply is rarely sufficient. It should be abundant, $1\frac{1}{4}$ or $1\frac{1}{2}$ for each basin. The rollers should of course be made to lock into their places, so that they cannot be abstracted and used for weapons. The objection to roller towels that they may be used for suicide by hanging does not apply very strongly to their use in lavatories, since these apartments will not be left without an attendant while being used, and when not in use will be kept locked.

SCULLERIES

should be separate from the closets, lavatories, and urinals, so that when not in use they can be kept closed, and inaccessible to the patients. The slop stones should be of glazed earthenware, 2 inches thick. They should be supplied with hot and cold water, and the valves should be of the same pattern as those in the lavatories, but of larger bore. Unless self-closing valves are used in the sculleries the waste of water will be very great, for the sculleries are largely used by patients. The waste pipe should be of large bore, 2 inches, and should be trapped immediately beneath the sink, the trap being then easily accessible. The traps should be furnished with screw inspection-plates, by the removal of which the interior can be cleaned when necessary. The floor of the scullery should be tiled and drained. It is well if the walls also are tiled for the lower 4 feet. Over the sink should be a plate rack; and a cupboard, dresser, table, and roller towel complete the furniture of the room.

SLOP AND BRUSH CLOSETS

are attached to dormitories, and should always be furnished with a window. If left a mere cupboard without light they are certain to become receptacles for all kinds of filth. They should be furnished with a slop sink for the reception of slops; with hot and cold water taps for the cleansing of chambers and other vessels; with racks from which brooms and brushes can be suspended, and these racks should correspond exactly in number with the number of brooms and brushes

allowed in the ward, so that it may be seen at a glance whether any of these implements are missing. There should also be rails for suspending dusters and cloths.

BOOT-ROOMS.

These are very important adjuncts to the wards, and should always be provided. They are for those patients who have been working out of doors to change their boots and wash their hands in before going into the wards. By this means not only are the wards kept free from dirty traffic, and the patients who are at meals, or who have settled down comfortably for the evening, are saved from the disturbance and unpleasantness of the change being effected in their presence, but the whole *morale* of the ward is raised by the fact that the working patients do not enter it until their boots are changed, their hands washed, and their toilettes completed for the evening. The boot-rooms should be fitted with lavatory basins.

SOILED LINEN ROOMS OR CLOSETS

are provided in some asylums, but their use is open to much objection, and in the opinion of the writer they are better abolished, and the space devoted to some more useful purpose. The general bulk of the linen is sent to the laundry on a fixed day in each week; and on that day, as soon as the garments are discarded by the patients and the clothes taken off the beds, they should be counted and immediately despatched to the laundry. Soiled linen should never be kept accumulated in a more or less fermenting mass in an apartment adjoining the wards. This principle, which applies to the clothing of ordinary patients, applies with tenfold force to that which is removed from patients of faulty habits. On no account should any obstacle or excuse be afforded to the detention of such articles in the neighbourhood of the wards for one moment longer than is absolutely necessary; far less should actual facility be offered to their detention. When a soiled linen room is provided, it will certainly be used, and its use can have no other effect than to delay the despatch of foul linen to the laundry. Hence, soiled linen rooms are not to be recommended.

COAL STORES.

Separate closets for this purpose are in some asylums placed in proximity to the wards, and are used to contain a store of coal for the use of the ward for a certain length of time. It is on every account better that such closets should not be employed, but, instead of them, coal boxes in

the wards and close to the fires. The engineer or storekeeper, who serves the coal to the various departments, cannot, it is obvious, maintain nearly so close a supervision over the consumption of the coal, nor have nearly the same power in checking waste when the coal is distributed weekly or at longer intervals, as when it is distributed daily. Moreover, another and a very serious drawback to the coal store is that, whenever the fire needs making up, the attendant has to leave the ward for the purpose, and to be absent from the ward and from the supervision of the patients for a longer or shorter time. If a single attendant only is in a ward and the fire needs attention, the temptation will be great for him to leave the ward "only for a minute," as he will say to himself, to fetch the coal. And it is precisely in such brief absences, when the patients are left unsupervised for what is intended to be, and perhaps may be, a very brief interval only, that accidents, casualties, and even fatal mishaps commonly occur. Lastly, a third and equally grave objection to the coal store is that it violates the second of the great principles that should govern asylum construction, the principle which states that an asylum should contain no "obscure recesses or places that can be utilised for hiding." To the patients the coal store will seem to have been providentially provided for this very purpose. They will constantly be on the look out to utilise it, and it will consequently be a constant source of anxiety to the attendants and other officials. No ; let there be no separate coal store attached to the wards.

WARD STORES.

Every ward should, however, have attached to it a small room provided with shelves and partitions in which the store of duplicate and surplus articles necessary to the proper administration of the ward can be kept. This room should be well lighted, dry, and its dimensions may be in the ratio of 1 square foot of floor space for each patient in the ward.

CHAPTER IV.

THE DINING AND RECREATION HALLS, CHAPEL, ETC.

IN an ordinary asylum, containing patients of every class in the usual proportions, the dining hall should be sufficiently capacious to seat at least two-thirds of the total number of patients. It should be light, lofty, and well ventilated, and, these conditions being fulfilled, the shape and decorations may be at pleasure.

If the dining hall is also the recreation hall, the floor should be as described under the latter heading.

The doors of the dining hall should be of ample width ; they should open the whole width of the passage by which the dining hall is approached. Insane patients going to their food are not to be checked by a trifle ; and any obstacle at this point will give rise to squeezing, jostling, and strife.

The tables are usually of plain deal, 3 feet wide, and may be covered with American cloth as advised for the ward tables. In this case table-cloths will not be needed. Marble-topped tables have been recommended, but they are liable to inflict injury if upset. If 10 feet long, tables will accommodate six patients on each side, and one top and bottom—fourteen in all. For seats, either forms or chairs are used, the choice being determined mainly by financial considerations. Tables covered with tiles are very cleanly and durable, and their cold appearance ceases with custom to be repellent.

For table furniture, see *Food*.

The dining hall should contain a piano or organ to be used for the accompaniment to grace before and after meals.

It is usual for the male patients to sit at tables on the one side of the hall, and the female patients on the other ; but at the Winson Green Asylum, Dr. Whitcombe has made the excellent innovation of placing the male and female patients on opposite sides of the same tables.

There seems no reason why the dining tables should receive less attention than the floors, nor why, if the floors be stained and polished, the tables should not be similarly treated. It would much improve the attractiveness of the dining hall if this were done. In the wards it is of less importance, because the tables are, or should be, kept covered, and the staining and polishing would be labour thrown away.

In the dining hall should be kept a couch, 5 feet 6 inches long by 2 feet wide and 18 inches high, covered with stout leather, and with a roll or bolster at one end. It should be mounted, with the intervention of springs, on four small rubber-tyred wheels, 8 inches in diameter. Its use is to remove rapidly and conveniently any patient who may be seized in a fit during meals.

RECREATION HALL.

This should be large enough to afford seating accommodation to two-thirds of the total number of patients. The seats should be chairs, preferably of bent wood, and should be laterally 20 inches apart from centre to centre, while the centre of each should be from 2 feet 9 inches to 3 feet distant from the centre of the seat of the chair immediately in

front of it. In arranging the chairs, a space at least 3 yards wide should be left between the stage and the foremost row of chairs, and round the other three sides of the room should be left a gangway 3 feet 6 inches wide. Another gangway, 4 feet wide, should be left down the middle of the room at right angles with the stage. The chairs may be united into rows of six or nine by running poles, made for the purpose, through rings or hooks attached to the backs of the seats of the chairs, and by this means the lines will be better kept.

The floor should differ from the floor of other parts of the asylum in being of hard wood—pitch pine or oak. The boards should not be more than 5 inches wide, should be tongued and grooved or keyed together, and the nails concealed. The surface should be planed very level and polished moderately.

At one end of the recreation hall should be a stage, the construction of which is outside the province of this book, but which should be fitted with male and female dressing-rooms, with lavatory accommodation in duplicate, and plenty of storage-room for scenery and properties.

At the other end of the hall should be a music gallery, of sufficient capacity to accommodate the asylum band.

Heating.—The heating of the recreation hall must necessarily be by hot water or steam, as open fires are manifestly inappropriate for heating so large an area. The coils should not be made up into large masses, so as to occupy much space and heat the apartment locally, but should be diffused uniformly and thinly round the walls.

Ventilation.—Inlets may be provided in the shape of gratings opposite the hot water coils, but such inlets are very insufficient where large masses of air have to be rapidly changed, as in a recreation hall crowded with people in active exercise. They should in all cases be supplemented by making the upper 2 feet of the window on the sheringham valve principle, as already described. These, when placed at about half the height of a lofty hall, will act as inlets if plenty of outlet area be provided at the apex of the roof. At this point the outlets should be *ample*. Little fiddling gratings here and there are no practical use whatever. Wide gratings should extend the whole way along the apex of the roof, and should communicate with fixed cowls above.

Lighting is best effected by sun burners, which also, if properly constructed with roomy jackets, materially assist ventilation. The objection to sun burners in recreation halls is that from the great height of the hall they are so distant from the eye that they must be made very powerful and to burn an extravagant quantity of gas in order to give sufficient light. But when it is considered that the use of the recreation hall is only occasional, this objection should not be considered fatal. If used, however, sun burners should be supplemented by smaller

burners at a lower elevation, both to reinforce them, and to be used on practice nights, when only a small portion of the hall needs to be illuminated.

A wheeled couch, similar to that described for the dining hall, should be provided for the service of epileptics whose fits occur in the recreation hall.

THE CHAPEL.

Little need here be said about the chapel, which does not materially differ in asylums from the chapels in the outer world. It is to be remarked that the pews of the officers are usually placed and furnished so as to mark a very conspicuous difference between them and the patients; in oblivion, apparently, of the passage of Scripture referring to distinction of persons.

The chapel should be furnished with a wheeled couch similar to that required for the dining and recreation halls, and for the same purpose.

RECEIVING ROOM.

An important section of the patients' portion of an asylum is the **Receiving Room**. This should of course be at the entrance of the asylum, near the hall porter's room, near the superintendent's office, and near the assistant medical officer's quarters. It should consist of the receiving room proper (which is often used for a visiting room as well), and of a roomy bath-room attached thereto. In the receiving room itself should be a weighing and measuring machine, so that the patient can be weighed and measured immediately upon his arrival. This being done, he is taken to the adjoining bath-room and bathed, the clothes in which he is admitted being here discarded. After his bath and medical examination he is dressed in garments provided by the asylum, and transferred to his appropriate ward. The advantages of having a bath-room attached to the receiving room, and of having the patient bathed therein on his admission, are great. The whole operation is conducted in the immediate neighbourhood of the offices of the medical officers, thus facilitating their presence thereat; and the patient does not enter the asylum until after he has been bathed and medically examined, and has undergone a change of clothing. If, therefore, he is suffering from communicable disease, this is detected before he has entered the wards, and before he has had an opportunity of communicating it to other patients. If, as is so often the case, he is swarming with vermin, these are left with his cast-off clothes in the care of the relieving officer, and are not imported into the wards of the asylum.

VISITING ROOM.

For remarks concerning visitors to patients, see p. 240. The visiting room should be sufficiently spacious for several parties of patients and their friends to occupy it not only without crowding, but without intruding upon each other's privacy. It should be well lighted, brightly decorated, and comfortably furnished, so as to leave upon the friends of patients a pleasant and cheerful impression of the place in which the patients are detained.

CHAPTER V.

COMMUNICATIONS.

Passages.—The passages or corridors of asylums should not be less than 8 feet wide, and are often 10 or 12 or even 15. Wide corridors, especially when furnished with an occasional bay, have the great advantage that they can be used on occasion as supplementary day-rooms, into which a turbulent patient can be placed by himself when the airing courts are not available; or in which a small party of patients can be accommodated on occasion with a quasi-private apartment. Corridors of the enormous length seen in many of the larger asylums do not lend themselves readily to decorative purposes, but shorter and wider corridors may easily be made very ornamental, and at the same time be invested with a comfortable and home-like air, as those who have seen the corridors at Prestwich will acknowledge. Hanging baskets of greenery and plaster casts of busts and statuettes at intervals will do much to lighten up these rather dreary appurtenances to an asylum.

The windows of corridors are usually small specimens of the "stopped sash" variety, but might be more economically constructed on the sheringham valve principle, or, better, pivoted in the middle, so as to open inwards at the top and outwards at the bottom.

The floors of corridors vary from ordinary 9-inch boards to tiles and York stone and Portland cement. In small asylums the former will be sufficient, but in large institutions in which there is much traffic, the last will be found most appropriate, because most durable. Tiles, unless of the expensive sorts, do not wear well. At Claybury a peculiar cement is used for the floors of corridors. It may be very durable, but it has a most offensive smell when wet.

Covered ways should connect all parts of the building to which patients have to go frequently or in large numbers. The wards should

be thus connected with the administrative block, with the dining hall, recreation hall, and chapel, with the laundry and the artisans' shops.

The opposite principle of entirely separating and removing as far as possible from the main building should apply to the hospital for infectious diseases, to the mortuary and the gas works.

Staircases.—The distinguishing feature of staircases in asylums is that they are not made with a well, so that this opportunity and temptation to suicide is absent. To every apartment in an upper floor there should be two staircases at points distant from each other, so as to afford an alternative exit in case of fire. (See *Fire*, p. 160.)

The staircases should be in short flights of not more than eight steps each, so as to minimise the danger of accidental or intentional falls. The stairs are usually of stone, but the use of this comfortless material does not appear to be necessary. In railway stations, in which the traffic on the staircases is much greater than in asylums, it is found possible to use wood, and the same material could surely be used in asylums also, where its greater security of foothold and comfort of appearance would be appreciated. The stairs should be wide, not less than 6 feet, the tread 11 inches, and the riser 6. There should be no winders. Hand-rails are usually of iron, but should be of wood, and should be on both sides of every staircase.

CHAPTER VI.

ADMINISTRATIVE PORTION.

THE administrative portion of an asylum consists of all those portions of the building in which the service of the asylum is carried on, together with the quarters for the accommodation of the officials. It includes the stores, the kitchen, and its appurtenances, the laundry, the shops and workrooms, and the offices, as well as the quarters of the officials.

THE KITCHEN

should adjoin and communicate with the dining hall. To allow sufficient space for the work of the asylum about 2 square feet per patient will not be too much. The kitchen should not be ceiled, should be lofty, lighted from above, and thoroughly ventilated. The floor should be of asphalt or other non-absorbent material; the walls, for 4 feet of their height, should be tiled. Where pipes are carried under the floor, they should be laid in troughs covered by iron covers, so as to be readily acces-

sible. For roasting the enormous quantities required in large asylums very large ovens are required, and by far the most efficient, equable, and economical method of heating these ovens is by gas, which is therefore commonly used for the purpose. The boilers, for soup, vegetables, &c., in which so high a temperature is not required, are heated by steam. In addition to the main ovens and boilers, a kitchener, or a range, or gas-cooking apparatus of ordinary size should also be supplied, as well for the cooking for the staff as for the smaller dishes occasionally required for the sick. As to the precise pattern and fittings of the several apparatus required, no instructions are needed here, since they are not essentially different from those required in other large institutions, and improvements in minor details of construction are made year by year by the makers. Care should, however, be taken that the valves for the control of the gas and steam are rendered inaccessible to the patients; and to every gas stove or set of gas stoves under the supervision of a single individual a separate meter should be provided as a check upon waste.

THE SCULLERY.

The scullery should have about half the area of the kitchen, and all sinks and slop stones should be of glazed stoneware 2 inches thick. No material is so cleanly and so durable. The old pattern of wooden troughs lined with lead is objectionable on many grounds. The lead expands when the trough is filled with hot water, and being fixed at the edges, the expansion produces wrinkles in the metal, which continually increase, partly by the repetition of the changes of temperature and partly by the dragging of heavy buckets, &c., along the surface, until ridges of considerable size are formed. The next step is that these ridges crack along their edges, where the fold is sharpest, and the trough leaks. The water continually escapes into the woodwork, which gradually rots away, and the trough is destroyed. Another objection to the use of these troughs is that their great weight drags them away from the wall, and in the crevices thus formed collections of vermin accumulate. Not only cockroaches, but slugs, brought in amongst vegetables, hide there, breed, and attain gigantic dimensions. They remain hidden during the day, but at night they emerge and leave shining tracks of slime over the walls, the shelves, and even over the food. Although, however, the lead-lined wooden troughs are inadmissible, it is a good plan to have a sheet of lead laid at the bottom of the stoneware troughs. It saves both the trough itself and the plates and dishes that are washed in it from chipping. The valves for hot and cold water supply will be the same as already described in ward sculleries.

It is customary in some asylums to provide an additional apartment

or second seullery for the purpose of preparing vegetables, but this seems a needless specialisation.

The potato peelings and other vegetable refuse should be discharged by means of a shoot into a truck outside, which can be wheeled direct on to the farm.

The water in which cabbages, &c., have been boiled should be drained off directly from the copper in which the boiling is effected into the sewers. It should never be emptied out.

Other offices that will be required adjoining the kitchen are one or more larders, a store for vegetables, and a knife-room, in which the knives used in the dining hall are kept and cleaned.

THE LAUNDRY.

The efficiency of this department is a very important element in the comfort and welfare of the patients. The laundry power of every asylum should be sufficient to afford for every patient two changes of under-linen per week, and at the same time to deal with not only the normal changes of bed-linen, but also with the sheets and blankets soiled by patients of filthy habits. The laundry accommodation needed by an asylum will therefore vary according not only to the number of patients to be provided for, but also according to the proportion of patients of filthy habits that it contains. Generally it may be laid down that a superficial space of not less than 700 square feet should be provided in the laundry for each 100 patients in the asylum. Of this area about one-quarter may be devoted to the foul laundry. In the largest asylums the laundry for the staff is separate from that for the patients.

The laundry should of course be so arranged that the clothes proceed straight forward from one operation to another, from the receiving room at one end through the wash-house, drying room, and ironing room, to the distributing room at the other.

In the fitting up of a laundry the proper course to pursue is to call in a firm which has achieved a first-class reputation in that department, to state the requirements of the institution, and to give the firm almost *carte blanche* to provide apparatus for satisfying these requirements. As some guide to what is required the following list of absolutely essential apparatus is given.

Wash House.

- | | |
|---|---|
| 1. A soap dissolver. | 6. A bluing machine. |
| 2. A soda dissolver. | 7. A sufficient number of coppers. |
| 3. A sufficient number of washing machines. | 8. Plenty of band-washing tubs. |
| 4. A rinsing machine. | 9. Plenty of rubber sudding rolls. |
| 5. A hydro extractor. | 10. Hand barrows, draining boards, baskets on trucks. |

Drying Room.—A sufficient number of drying closets will be five 10-foot horses to every 100 patients. A great improvement on the ordinary drying horses, lately introduced by Mr. Hine, is the addition of a fan, by which the dry air is drawn or driven through the drying closets. By this means the clothes are dried much faster, and are made fresher and sweeter than when dried in comparatively stagnant air.

Ironing Room.—The furniture of the ironing room should consist of

A steam mangle.

A hand mangle.

A starch mixer and starching machine.

An ironing machine for table-cloths and large articles.

An ironing machine for collars and cuffs.

One or more ironing stoves.

The Foul Laundry should be fitted with rinsing tanks, coppers, and washing machines, and should have a separate set of drying closets.

Boiler House.—For such extensive requirements as those of a public asylum the source of the steam, for driving the machinery for the pumps, the laundry, and the engineer's shop, for heating the water for the laundry, lavatory, and baths, as well as for the circulating apparatus, will be the Cornish boiler, undoubtedly the most efficient and economical form of boiler where ordinary quantities of coal are consumed. Cornish boilers are easy to manage, simple in construction, easy of access for cleaning and repairs, and what is of the greatest importance for asylum use, they are of large steam-holding capacity. The boiler power required will be about one 28-foot boiler to each 150 patients. Hot water will be procured, not by providing special boilers for the purpose, but by passing a jet of steam into the hot water tanks.

Arrangements should be made for the economical utilisation of exhaust steam from the engine. It can be used for heating water for the laundry and for other purposes.

STORES.

This department of the asylum should be spacious, airy, well ventilated, and of course in a central position. It should adjoin, if it do not contain, the steward's office, and be in close communication with those of the clerk, matron, and workmaster. A large general area will be required for moving and dispensing the stores, say 100 superficial feet per 100 patients; and in addition will be required the following separate departments :—

Bedding store	200 square feet per 100 patients.
Clothing store	100 " "
Crockery and utensil store.	20 " "

Butter and cheese store . . .	40 square feet per 100 patients.
Boot store	10 " "
Bread store	25 " "
Flour store	25 " "
Meat store	15 " "
Grocery store	30 " "

WORKSHOPS.

Workshops in asylums do not differ materially in construction or in fitting from workshops outside. It is unnecessary, therefore, to go into detail with regard to them. The only matter that need be attended to is the necessity of easy and thorough supervision. It is desirable, therefore, that there should be easy access from one to another, and that the partitions between the various departments should be glazed. It is scarcely necessary to say that with regard to lighting, both natural and artificial, ventilation, warming, fittings, and other arrangements, they should fully reach the highest standard of qualification.

The shops required in every asylum are :—

On the Female Side.

Needleroom

Cutting-out room

On the Male Side.

Carpenter's shop

Tailor's shop

Upholsterer's "

Shoemaker's shop

Painter's "

Dairy

Plumber's "

Bakehouse

Smith's "

Slaughterhouse

Engineer's "

The above are essential, and cannot be dispensed with ; but in addition it is very desirable, at any rate in large asylums, that there should be added a printing-press, and the simple apparatus necessary for making mats of cocoa fibre.

OFFICES.

In addition to the divisions of the establishment already enumerated, the administrative portion contains the offices of the several officials, which demand a brief notice.

The Superintendent's Office is usually the situation of the electric tell-tale, when the asylum contains one. Provision has to be made for the statutory books, and these are best contained in the pedestals of the knee-hole writing table, where they are instantly accessible. The work of the superintendent is distinguished by the great number of forms that he has to fill in and sign. Some of these

are required by statute ; others are used to facilitate the work of the asylum. They are numerous and bulky, and yet must be kept ready to hand, so that any one of them can be reached by a mere movement of the arm without rising. The best method of arranging them is on shallow shelves, a range of which should stand on the desk in front of the writer. The name of each form can be written on the edge of the shelf above, and thus the form required can be selected instantly and without mistake. Where the forms are kept in pockets standing upon their edges this cannot be done. The commoner forms, which are constantly in use, are selected readily enough, but time is wasted in hunting for those which are seldom used. For foolscap forms the shelves should be 9 inches wide, 14 inches deep, and 1 inch high. This will contain three quires, a sufficient amount for daily use. The statutory notices that have to be provided for will be found enumerated on p. 238. The other forms will of course vary in different asylums, and the shelves for their accommodation will vary accordingly.

The superintendent's office should communicate by speaking tube or telephone with every ward, and with the office of every other official in the asylum. It should also be in telephonic or telegraphic communication with the neighbouring police stations and with the telephonic exchange of the nearest town.

The Assistant Medical Officer's Office.—An office should be provided for the assistant medical officers, in which the case books and instruments of diagnosis and measurement can be kept. A difficult and complicated case cannot be satisfactorily investigated amid the distractions of the wards, and it is scarcely fair that the medical officers should be obliged to interview the patients for this purpose in their private rooms ; while the dispensary, ordinarily the only other apartment at their disposal, is obviously most unsuitable for the purpose. The assistant medical officers should therefore be provided with an office, properly fitted with lamps for ophthalmoscopic or laryngoscopic examination, provided with a weighing machine, with electric batteries, test-types, tuning forks, and all the many appliances required for a thorough investigation of both physical and mental symptoms.

Other Offices.—The offices of the other officials do not need special description, since there is nothing in their arrangements or fittings which need differ in asylums from those of offices in other large institutions. The officers who need accommodation of this description are the steward, the clerk, and the matron. The head attendants are sometimes provided with offices, but this seems scarcely necessary. The small amount of clerical work that they are called upon to perform can well be done in their own sitting-rooms.

The chaplain's office will be the **Library**.

The other official apartments needed are a dispensary, a mortuary, a pathological laboratory, and a photographic studio, with the necessary dark-room.

The Dispensary will not differ in any essential respect from dispensaries in hospitals. It should be provided with a hatch, having a door flush with each wall, through which the medicines can be served to the attendants, thus avoiding the necessity of the attendants entering the dispensary, where they are very apt to loiter and gossip.

The Mortuary should consist of three apartments: one for the bodies of males, one for the bodies of females, and communicating with each a roomy, well lighted and fitted post-mortem room. In addition there should be a **Pathological Laboratory** for the preservation and examination of specimens, and for experiments and pathological work of all kinds. It need not be near the mortuary, which is always at a distance from the main building, and is usually very exposed, cold, and unsuitable for sedentary occupation in winter. The pathological laboratory should be near the quarters of the assistant medical officers, so that it may be of ready access to them. The fittings of the pathological laboratory are very simple. The light should be ample, and should come from the north. Along the north side of the room should run a bench 2 feet in width, interrupted at one spot by a stoneware sink supplied with hot and cold water. The wall between the windows should be furnished with shelves, as should also the opposite wall, the others being provided with cupboards. In the middle of the room should be a strong substantial deal table. A skylight over one portion of the room is much to be desired. The instruments and apparatus are best left to the discretion of the pathologist, and acquired from time to time as they are wanted.

The Photographic Studio should be near the receiving room, so that patients may be photographed on admission. The fittings of the studio need be but very simple. It should be built against a north wall, glazed with glass that must not be green or yellow, but should have if anything a bluish tint. The ends of the studio should be protected from the morning and afternoon sun, but the middle portion of the roof and the north side may be wholly of glass. Blue curtains should be provided, and so hung that any portion of light at pleasure can be cut off. White screens should also be provided for the purpose of reflecting light when necessary to prevent the shadowed side from being too dark. A perfectly plain background should be provided (see p. 273).

CHAPTER VII.

ACCOMMODATION FOR THE STAFF.

THE accommodation for the staff of asylums ought to be good and thoroughly comfortable, and this not only for the superior officers, but for all grades down to the lowest of those whose duties keep them much in contact with the patients. The life of those who are in constant or frequent attendance on the insane is very trying. It requires constant vigilance; the continual exercise of attention. It is full of provocations which need constant and vigorous control of temper to bear without retaliation. It is lived as a rule in remote country districts, far from ordinary sources of recreation and of communication with varied society. The staff of a lunatic asylum live in great isolation from the outer world, engaged in a narrow round of duties of an onerous, responsible, and exacting nature, and it is therefore only right that their lot should be alleviated in those respects in which it is susceptible of alleviation, and that they should be well found in respect of accommodation and material comforts.

With regard to certain members of the staff, there is, it must be admitted, little left to be desired as to the comfort and even luxury of the accommodation placed at their disposal by the asylum authorities. The residence of the medical superintendent is often almost palatial in its splendour, and the chaplain, the steward, the matron, and other superior officers are often thoroughly well and comfortably housed. It were much to be wished that a proportionate amount of attention were directed to the accommodation of the subordinate staff; but, in the majority of asylums, the attendants' quarters are far from desirable. I am acquainted with at least one large asylum of over 2000 patients in which the whole furniture of the sitting-room of the head attendants consists of a table and a few wooden chairs.

Every attendant ought to be provided with a separate sleeping apartment, even if only a cubicle, and this should be provided with a separate key distinct from that of every other attendant's room. The great majority of attendants should have sleeping apartments in a separate building away from the wards, and removed from the noise of the patients. On each side of the building the attendants should be furnished with both a messroom and a clubroom. In too many asylums they have not either, and the asylums are few indeed in which they are provided with both. To require an attendant, who

already spends almost the whole of his waking life among the patients, to take his meals also among them, amid the turmoil and interruption of the ward, is most unseemly and improper; and to require him to eat in the dining hall after the patients have finished, and when the air is heavy with the reek of the previous meal, is little better. The attendants should have a proper messroom devoted to the purpose of their meals and to that alone. In addition to the messroom, there should be a neat, comfortably furnished clubroom, for their occupation when off duty. If the messroom is utilised for this purpose, the amenities are either neglected or pushed away into corners. Any occupation, either work or play, for which a table is required, cannot be undertaken till the meal is cleared away, thus restricting the scanty time available for its pursuit, and must be interrupted when the next meal becomes due. The room is full of the smell of meals, and the dining table and the necessary chairs around it occupy the floor to the exclusion of all other furniture. Certainly a clubroom ought to be provided in addition.

In many asylums the assistant medical officers are sumptuously lodged, while in others their quarters are little more than cupboards. Considering the value of attracting a high class of medical men to hold these appointments, and the value also of inducing them to stay a considerable time in their posts, it is desirable that the assistant medical officers should be well housed, and that their quarters should be furnished with comfort at least equal to that of the ordinary practitioner outside the asylum.

Between the attendants and the assistant medical officers are several grades of officials, all of whom should be suitably and comfortably housed.

CHAPTER VIII.

AIRING COURTS.

THE size of airing courts will of course vary with the class of patients that are accommodated in the asylum, and with the opportunities that the patients are allowed for exercise outside the courts. But as a rule an area of one acre to every fifty patients is a fair allowance.

The airing courts should be laid out with turf, shrubs, trees, and flowers. The gloomy asphalted or paved yard, surrounded by a high wall, is now happily a thing of the past, but even now airing courts are, in many cases, not as tastefully laid out as they might be; and, in some,

are of such contracted dimensions that the patients can scarcely move without jostling each other. The outer boundary of the courts, where it coincides with that of the estate, should be a wall rising from the foot of a ha-ha, so that without the forbidding appearance of undue height, the wall may still on the inner side be high enough to be unclimbable. The height above the general level of the ground should be not more than 7 or 8 feet—just enough, in fact, to prevent passers-by from making a gape-show of the patients. Within, the height may be increased by the device of the ha-ha to 12 feet. The top of the bank on the inner side of the ha-ha should be not less than 12 feet from the wall in horizontal distance, nor should it in vertical height be less than 5 feet below the top of the wall. The trees planted on this bank must be prevented from throwing their branches out towards the wall, such branches affording to active patients an easy means of escape. The bank in question should be well covered with evergreen shrubs, which will hide the wall at all seasons of the year, and so take off from the contracted appearance of the court and diminish the suggestion of restraint that is offered by the wall. At irregular intervals among the shrubs should be tall trees.

Shrubberies should not be so thick as to afford to patients an easy opportunity of secreting themselves therein, but shrubs should be abundant and varied. Those in the following list are appropriate :—

Conifers: Cupressus Lausoniana and Milkaensis, Cedrus Devana, Pinus Cembra,|| muritica, pumilio,||† uncinatus,|| maritima,|| insignis,|| pinaster,|| nobilis,§ Austriaca,||§, pumilio, Librocedrus decurrens, Thuja Lobbii, Juniperus Chinensis, Biota Orientalis aurea, Thuja Occidentalis, Larch.§

Other evergreens: Hollies in variety,||§† Berberis Darwini,||§†* aquifolia,* Aucuba Japonica,||† Box in variety,||§† Privets in variety,||†*§ Laurel,§ Portugal Laurel,† Rhododendron in variety,* ponticum, and Catawbiense,† Magnolia glauca,* Erica Carnea,* Daphne Cneorum,* Ilex,|| Double Furze,||* Euonymus,|| White and Spanish Broom.||*

Deciduous: Elder,*§ Snowberry,†* Hypericum in varieties,*§ White thorn in varieties,*§ Hornbeam,† Ribes in variety,||§* Guelder Rose,§* Periwinkle,§* Heaths,* Lilac,* Laburnum,* Pyrus Japonica,* Buddlea globosa,||§* Magnolia conspicua,* Roses in variety,* Almond,* Syringa.*

Native and naturalised trees need not be particularised, but with reference to these it should be remembered that some, such as the horse chestnut and the sycamore, have a very deadly effect on vegetation beneath them. They should, therefore, be sparingly grown, and placed in such situations that the bare space beneath them is not unsightly. A large horse chestnut tree may be placed, for instance, in the centre of

* Flowering shrubs or trees. † Flourish in the shade. § Will thrive on chalk.
|| Unaffected by exposure to cold winds and sea breezes.

a space of gravel where several paths meet, and will of itself suffice to keep the gravel clear of weeds, but it should not be placed on grass, or there will always be a bare space under it. The poplar will flourish in any soil, however poor or heavy. The elm, lime, Spanish chestnut, oak, and beech will grow almost anywhere. Yews must be avoided, as suicidal and demented patients may eat the leaves, and so poison themselves. For the same reason, other poisonous plants—nightshade, fox-glove, aconite, and fool's parsley must be sedulously excluded.

Flower-Beds.—Flower-beds should be made in appropriate positions in all the courts, and should be kept gay with flowers throughout the season. For this purpose, and for keeping the wards and dining hall supplied with plants, glass houses should be provided and stocked, and care should be taken that the plants therein cultivated are remitted to their proper destination, and are not used solely for the decoration of the officers' and attendants' rooms.

Paths.—The paths in airing courts should be wide, not less than 10 feet, should be thoroughly well made, with a foundation not less than 6 inches thick of broken brick and other coarse rubbish, so that they may dry rapidly after rain. Over the foundation should be 2 to 3 inches of binding gravel. At every depressed spot a catch-pit should be placed, surmounted by a grating to carry off rapidly the storm water. Twenty-five yards is an appropriate distance apart for catch-pits. A pipe from near the top of the catch-pit should if possible be arranged to carry off the surplus water that the pit will not hold. This pipe should lead to the nearest surface drain. The whole airing court should be well drained with agricultural drain tiles, unless the soil is very porous. The paths should be winding, and should be so planned as to give the maximum length of path that the size of the airing court will allow. The paths should not wriggle about the courts in a meaningless manner, nor should they be quite straight. Large gentle sweeps of differing curvature are the most desirable.

Seats.—Airing courts should be plentifully supplied with seats, enough to accommodate at least a fourth of the number who habitually use the court. Ordinary wooden garden seats are the best for the purpose, those made of the timber of old ships being very strong and durable. Every autumn, as soon as the weather has become too cold for the patients to be allowed to sit down out of doors, the seats should either be taken up and stacked away in a shed provided for the purpose, or they should be encased in covers made of Willesden rotproof canvas, constructed to fit them and to be fastened on. In this way the life of the seats may be prolonged indefinitely, and the patients are prevented from sitting about in cold weather. The seats should be placed in dry and shady spots.

In addition to these seats, others should be provided under shelter. In various places in the court a penthouse should be erected, of a more or less ornamental nature, with seats under it, so that infirm patients may be able to sit in shelter from the sun and wind, and so that shelter may be at hand in case of a passing shower.

In a place not far from the entrance to the ward a closet should be placed—not a mere privy, but a proper water or earth closet, and to one attendant should be assigned the duty of keeping this in proper order. It should of course be searched whenever the patients are brought in from the court.

Aviaries and pheasantries may be erected at a very small expense, and should be kept stocked with various kinds of birds. Few things give greater pleasure to patients than to watch the doings of birds and animals and to make pets of them, and nothing gives such an ornamental appearance to a garden, or such an air of thoughtfulness for the inclinations of patients, as the inclusion of a number of ornamental live stock—the gorgeous golden pheasant, the graceful silver pheasant, doves, pigeons, “linnets, and all the finches of the grove.” With the same object in view, a few tame animals may be kept in appropriate enclosures—a few rabbits, squirrels, guinea pigs, and so forth. They offer to the patients something to interest them, something to mitigate the intolerable dreariness of a monotonous life, something to look at, to watch and to care for.

Every airing court should be furnished with games, the appliances for which should be kept in a small shed erected for the purpose in a conveniently central position. The appropriate games are enumerated under the head of Amusements. Directions for preparing the ground and obtaining a good turf for cricket and other games will be found under the heading of Amusements. All that need be said here about these grounds is that they should be surrounded by trees, planted not in formal rows, as the sides of a square, for instance, but in clumps and patches of unequal size and irregular outline, and that the colour, massing, outline and habit of the trees should be varied as much as possible. Under these trees should be placed abundance of seats for spectators of the games.

PART II.

FOOD AND CLOTHING.

CHAPTER IX.

FOOD.

THIS is not the place either for analyses of foods or for those elaborate balance-sheets of "waste and repair" which may be found in all manuals of physiology, and with which every manager of an asylum may be supposed to be already familiar. Certain general considerations which govern the kinds and amounts of foods required by different classes of people are all that need detain us here.

Foods have two functions to perform—the supply of substance to the body to repair waste of tissue, and the supply of force to make up for the dissipation of energy. The amount of substance wasted by adults is not large, and the chief need of food is to replenish the store of bodily energy which is dissipated in every bodily movement, as well as in the maintenance of the bodily temperature. It is commonly stated, indeed, as far as I know, universally so, that the function of food is but twofold—to make good waste of tissue and to maintain temperature; but it is manifest that energy is expended in mechanical movement as well as by loss of heat, and that the function of food is as much to replenish the one form of energy as the other.

Again, foods are of three main kinds—Nitrogenous, represented by meat, Starchy, and Fatty. Of these, the first is commonly designated the flesh-forming, and is looked on as the great repairer of waste, while the others are termed heat-producers. These terms are, however, to a considerable extent misnomers. Starchy and fatty foods go not only to maintain the bodily temperature, but also to some extent to build up tissue, and also, especially fat, to a considerable extent to replenish the energy which is stored up in the nervous system and set free as mechanical movement of the body. Nitrogenous foods also—flesh-formers, as they are commonly termed—have a most important function of the same kind to fulfil. There is no doubt that the energy locked up

in the highly complex molecular constitution of the various forms of albumen and its allies forms a very important source of replenishment of the energy which it is the function of nervous tissue to store and distribute. Among chemical compounds, the distinguishing feature of those into whose composition nitrogen enters, is their great instability; and when nitrogen enters largely into the composition of a substance of high molecular complexity, the compound so formed is unstable to the point of explosiveness. It is not to be supposed that in the organic compounds found in the living body nitrogen is deprived of the characters which distinguish it in artificial substances. The evidence, if evidence were needed, is all the other way. For the albuminoids are all of them substances so easily decomposable that the greatest care is necessary to prevent their decomposition—to keep our meat and eggs from “going bad.” This character of ease of disintegration, of quasi-explosiveness, is retained by nitrogenous compounds in all their combinations, and in none more completely than in the combination they form in the reintegration of nervous tissue after its functional waste. Hence, when we want to get a large display of energy from an animal, we feed it upon a highly nitrogenised diet. Hence racehorses are fed very largely on corn; while oxen, which are required to form substance only, and not to expend force, are fed on food containing a very poor percentage of nitrogen.

The application of this doctrine to the dietary of the insane is manifest. The insane are conspicuous for their dynamical abnormality. They tend to exhibit mechanical energy in excess, as in acute mania, or in defect, as in dementia. Epileptics, in particular, display most remarkable periodical explosions of nerve energy. Manifestly, then, the diet of the insane should be strictly regulated in accordance with the form and symptoms of their malady. Nitrogenous food should be given freely to the melancholic and demented, sparingly to the maniacal, and doled out with parsimonious hand to those who suffer from epilepsy.

Other considerations also influence the proportion in which the several kinds of food should be allowed to patients. From the considerations above mentioned it is evident that those patients who do laborious work, and therein expend a large amount of energy, need more than those whose occupations are sedentary, and still more than those who do not occupy themselves at all.

Again, the ability to assimilate nitrogenous food diminishes as age advances, and persons over fifty need less, and should be allowed less, than younger people.

In actual bulk, starchy food should always form the greater portion of the diet of all people. Persons engaged in strenuous physical labour need a diet containing 60 per cent. of starch and sugar, persons in ordi-

nary employment 67 per cent., and idle people no less than 75 per cent. Albuminates come next in bulk, and form a proportion equal to $\frac{1}{8}$ or $12\frac{1}{2}$ per cent. in the idle, to 23 per cent. in those whose occupation is very laborious. Fat, though a necessary, need not be a large ingredient in diet, the proportion varying from 6 to 13 per cent., the remaining percentage in each case consisting of salts.

For patients in ordinary work, the standard diet should contain about 9 oz. of meat, 3 oz. fat, and 25 oz. of starchy food (bread, potatoes, &c.) per diem. For idle persons these amounts may be diminished to 5 oz. meat, 1 oz. fat, 20 oz. starchy food.

Besides quantity, variety of food is a matter of some importance to the health, and of much to the comfort of patients. "According to the best writers on diet, it is not enough to give the proximate dietetic substances in proper amount. Variety must be introduced into the food, and different substances of the same class must be alternately employed. It may appear singular that this should be necessary; and certainly many men, and most animals, have perfect health on a very uniform diet. Yet there appears no doubt of the good effect of variety, and its action is probably on primary digestion. Sameness cloy, and with variety more food is taken, and a larger amount of nutriment is introduced. It is impossible with rations to introduce any great variety of food; but the same object appears to be secured by having a variety of cooking. In the case of children especially, a great improvement in health takes place when variety of cooking is introduced; and by this plan (among others), Dr. Balfour succeeded in marvellously improving the health of the boys in the Duke of York's School." (*Parkes*.)

The healthfulness of a variety of food is allowed by the best authorities; but beyond its healthfulness, its desirability is beyond doubt. If the least rapacious of the managers of asylums will picture to themselves the monotony of a diet which admits of but seven changes—one for each day in the week—and the consequence to the appetite of knowing every day for a certainty exactly which of these few varieties will be available, however little addicted he may be to the pleasures of the table, he can scarcely fail to see how disgusting this arrangement must become, and how desirable it must be for those who are subject to this regime, without possibility of escape from it, to have some variety, or at least some uncertainty introduced into it. A simple method of effecting this object would be to arrange the diets, not for a week, but for a fortnight, so that on every one of fourteen successive days the diet should be different. A better plan is that pursued by Dr. MacDonald, at the Dorset Asylum, of having a list of dinners presented to the superintendent at the beginning of each week. From this list he chooses seven dinners for the following week, and settles

the day on which each dinner is to be given. In this way, not only is greater variety provided, but what is of almost equal importance, the patients do not know before they sit down to dinner of what that meal is to consist. With the resources at our disposal there can be no real difficulty in effecting a greater variety of dinners, and its beneficial effect on the comfort of the insane poor would be very great indeed. It is, indeed, surprising that the managers of asylums in this country have not availed themselves more of the cheap and nutritious foods prevalent in other countries, which are now imported so very largely into England, and which, properly cooked, and served with the necessary additions that are required to make them tasty, and to complete their nutritive value, would be highly relished, and would import into the monotonous diets of our asylums that variety which they so sorely need. The foods alluded to are such as haricot beans, maize, rice, lentils, and oatmeal.

The **beverages** are, in many asylums, subjects of difficulty and discontent. In most parts of the country the affection for the national beverage—beer—is very strong, and as it is now very usually omitted from the diet of those patients who do not work, and given to those who do, it forms a very strong inducement to employment. The wholesomeness of beer for those who are engaged in laborious physical work cannot be doubted, and when it is well liked, it should under such circumstances be given. For those who lead idle lives beer is neither necessary nor wholesome. When beer is withdrawn, however, from the customary diet, and no longer accompanies the midday meal, difficulty is often found in providing a substitute that will not produce discontent. Tea, coffee, and cocoa have all been tried, with a success which has varied, but has not on the whole been great. Plain water is decidedly unpopular, and for this there are physiological as well as sentimental reasons. In the great majority of our asylums the water is drawn from the chalk, and is extremely hard in consequence. This hard water is not well suited for drinking, as it is apt to cause dyspepsia and constipation. It is well known that animals will always choose soft water in preference to hard, and that grooms will never, if they can help it, give hard water to horses, on account of its making the coat harsh and staring. Apart, however, from the hardness of the water, the mere ingestion of a pint or so of cold water is a serious tax on the energies of the aged, especially in winter, when the water is at a temperature not much above the freezing-point. In the first place, the shock of the cold application to the interior of the body is depressing; and in the second, to raise by some seventy degrees the temperature of a pound or so of a fluid of so very high a specific heat as water, is a serious demand upon the heat-forming capacity of old people. There are

several beverages that are cheap, easily made, palatable, and not open to the objections that can be brought against cold water.

1. To each gallon of water, 1 oz. cream of tartar, $\frac{1}{4}$ lb. sugar, 1 lemon. Cut the lemon in half, squeeze it on the sugar. Add the cream of tartar and the squeezed halves of the lemon. Pour on the whole the water, boiling. Drink when cool.

2. $\frac{1}{2}$ lb. of oatmeal, 5 gallons water. Boil for half an hour. Strain. Add 1 lb. sugar and $\frac{1}{2}$ oz. citric acid, or 1 oz. tartaric acid.

3. 1 oz. essence of ginger, 1 oz. essence of cloves. Water, 3 gallons.

The selection of diet is limited by two chief considerations—first, the cost; and second, the difficulty of preparation. Fare for patients must be economical, and must be capable of preparation and cooking with a minimum of labour, for when very large numbers have to be fed the labour of preparation is a very important question, the mere hanging of the meat in the gas oven of an asylum occupying ten minutes. The hours of meals should be so arranged that there is not too long an interval between the last meal in the evening and the first in the morning. Three meals a day is the universal allowance, and if the breakfast is at eight and the tea at six, as is usual, an interval of fourteen hours is left, which is certainly quite long enough. Breakfast and tea usually consist of bread and butter, from 5 to 8 oz. of the former to $\frac{1}{2}$ oz. of the latter. Not less than 6 oz. bread should be given at this meal to adult males. Oatmeal porridge with treacle or sugar might be profitably substituted once or twice a week for those patients who like it. Bread and milk for others. For yet others, mush, gruel, and stirabout.

For dinner the choice of meats is beef, mutton, or pork, roast or boiled. This is occasionally varied by soup, fish, and, in some asylums, meat pie or pudding without meat. The universal accompaniment is potato, with the occasional addition of green vegetable, which nine times out of ten is cabbage.

In this meal there is room for abundant improvement. The soup is almost universally disliked, and the reason is manifest—it is often little better than greasy warm water. A thoroughly good nourishing soup, made with a good stock, thickened with a good proportion of peas or lentils, and containing abundance of vegetables, would be liked, and would be a sufficient meal. The soup ordinarily served in asylums is neither the one nor the other.

Fish is an excellent food for persons who, like the majority of asylum inmates, lead indolent lives, since it is very easily digestible. It is, however, often disliked. Its palatability, as well as its wholesomeness, might be greatly increased by the addition of a small quantity of fat, say half an ounce of butter, to each portion. The so-called melted butter often served with it is a very inferior substitute, containing little butter and much flour. Bread or potatoes should be given with the fish.

Meat pie is a ration that is usually well liked if properly prepared. It is a substantial, nourishing, and wholesome dish.

Irish stew, known in Lancashire as potato-hash, is an excellent dish if properly made. Too often it is a nauseous mess. Liver and bacon and tripe are popular by way of change.

An excellent dinner, which I have never seen in any asylum, is pease-pudding, with a small allowance—3 oz.—of fat bacon to each ration.

The vegetables allowed in asylums might with advantage be much increased. Potatoes and cabbage are very well, but there are other vegetables equally and even more nutritious, which might be occasionally added to or substituted for them. Among these is rice, which forms an excellent addition to a fish dinner. Haricot beans, which go well with every kind of meat. Carrots and turnips and beetroot, which should be largely grown on the asylum farm. Jerusalem artichokes, the cultivation of which is extremely easy, and needs no labour save that required for an annual manuring and the raising of the crop. They are usually excluded on account of the labour and waste involved in paring them, but they may be boiled whole, and are one of the most delicious of vegetables.

On soup days the soup should be followed by pudding.

The invariable bread and butter for tea should be varied, the bread with cake, the butter with jam, marmalade, treacle, and dripping, and the tea with cocoa.

CHAPTER X.

FOOD TESTING.

THE food supplied to asylums is either contracted for or is derived from the farm attached to the asylum. In either case, it has, on reception at the stores, to be tested as to quality, and weighed or measured as to quantity. The latter operation need not detain us. But the testing of the food is a most important matter, and should never be omitted, samples being taken when necessary, and the result of the testing recorded both on the counterfoil of the delivery note and in the books of the asylum.

Meat.—Meat should be neither too fat nor too lean. Exact estimation is of course impossible, but there should be plenty of suet inside and specks of fat among the meat. It should not contain more than 20 per cent. by weight of bone. The fat should be firm, white, and healthy looking. It has sometimes a gelatinous appearance, and is

sometimes very yellow. The yellow colour is due to the feeding on excess of oil-cake. The flesh should be firm and elastic, of a purple colour when freshly cut, becoming after a while red, but neither brilliant scarlet nor pale pink. It should be uniform in appearance, and free from spots or marbling of discoloration. The connective tissue between the muscles should be firm and scanty. If it tears easily it denotes that the meat is stale, and putrefaction is beginning. If it is soft while the meat is fresh, or if it has a mucilaginous appearance, or especially if it contains pus, the meat is diseased, and should be rejected.

Tainted meat is recognised by the smell, but before it has acquired the offensive smell of putrefaction it undergoes changes which show that it has become stale and decomposition is about to set in. The colour becomes paler, the smell alters, without becoming actually putrid, and a knife thrust into it finds some parts softer than others. A smell may be then detected on the knife.

The marrow should be light rosy red; if brownish, or with black points, the animal was diseased, or the meat is beginning to go bad.

The meat should not be watery or messy. After some hours a little reddish juice will flow from good fresh meat, but a large quantity of watery fluid shows that the meat is bad.

Salt Meat, if very hard, tough, and shrivelled, is too old, and should be rejected. Large pieces should be divided to see if they are decomposed in the middle.

Flour should be quite white. It should be free from lumps and grit, it should not smell musty, mouldy, or sour, and should not taste sour; when made into a paste with water it should be tough and easily drawn into strings. Mites are recognisable with the naked eye, and easily with a magnifying-glass. They show that the flour is beginning to decompose. Flour is very little adulterated, and if at all, with the flour of other grain, such as rice, maize, oats, barley, &c. These may all be detected by microscopic examination, the form and size of the starch grains and of the cellulose envelopes being very different from those of wheat. To test for alum, shake some of the flour strongly with chloroform. The flour will rise to the top, and any foreign mineral matter will sink. Pour off the chloroform with the flour, and to the residue add an alcoholic solution of hæmatoxylin containing an excess of ammonia carbonate. If alum is present, a deep blue colour is produced. Alum is added to hide the defects of inferior flour.

Bread should be well baked, not burnt on the surface nor sodden in the interior. The small cavities in the bread should be nearly uniform in size, and distributed evenly throughout the interior. It should be white in colour, and should have no acid taste. To detect alum, soak a slice of bread for five minutes in the ammoniated solution

of logwood, remove and allow to drain ; in an hour or two it turns blue if alum is present.

Butter and margarine are tested chiefly by the smell. Any foul-smelling butter should be rejected. The only adulteration of importance is water, which may be added in excess to increase the weight. If a quantity of butter is melted in a glass, water, if in excess, will be seen in a layer under the melted butter.

Milk varies a good deal in composition with the age and breed of the cow, the age of the calf, and the method of feeding, but there are certain limits that it should not exceed.

The specific gravity should be not more than 1035 nor less than 1026.

The smell should be faint and healthy. Sour milk is detected at once by smell.

Put some milk into a tall graduated cylindrical glass, and at the end of twenty-four hours read off the percentage of cream ; it should not be less than 12 per cent.

Cheese is tested only by smell and taste. These should be equal to sample. It should not be too salt, nor too rank in smell, neither should it be too "strong." Cheese should have a uniform smooth surface, should be everywhere of firm consistence, free from cracks, and uniform in colour. When cut through, it should not be soft and buttery in the middle. It should be free from holes (this does not of course apply to Gruyère), from mites and maggots.

Sugar should be equal to sample in colour and dryness. A portion should be dissolved in cold water, and should leave but a very slight residue undissolved.

Tea.—The leaves should be in large pieces, not broken up nor reduced to dust. There should be a good proportion of young leaves, known by their smaller size and thinner texture. The characteristic aroma should be powerful. The only way to test quantitatively whether the tea is equal to sample is to take a weighed quantity, say 100 grains, and infuse in a measured quantity, say 5 oz. of boiling distilled water, for a certain length of time, say five minutes, then to dry thoroughly and weigh the exhausted leaves. The loss of weight should be the same as that of the sample treated in precisely the same way.

Coffee in the berry is not easily adulterated, though it is said that ground beans are compressed in moulds to imitate the coffee berries. Ground coffee is adulterated with chicory, roasted corn, beans, potato, mangold, parsnip, carrot, and even sawdust. These can be detected with certainty by microscopic examination. Roughly, coffee may be tested by throwing the ground berry into cold water. The coffee will float at first, while the chicory will sink immediately. Coffee will not

discolour the water for some time. Chicory and other adulterations will do so at once.

Cocoa is scarcely ever sold pure. It must be compared with sample as to appearance, colour, moisture, smell, and taste.

Vinegar.—The specific gravity must be equal to sample, and in no case below 1015. The usual adulteration is sulphuric acid, but this can be determined only by a chemist.

Pepper, when ground, is largely adulterated with other seeds. It should be bought in the berry, which is not adulterated, and ground for use as wanted.

Mustard is also greatly adulterated. The foreign materials can be easily detected by the microscope by an expert. It should be bought in bulk of a firm that has a reputation to lose.

Salt should be white and clean, and dissolve completely in water.

Beer cannot be tested without a chemical analysis. It should not be turbid nor sour.

Tinned Provisions.—Notice whether the tin is “blown,” and if so, reject. A “blown” tin is a tin whose ends or sides are bulged or bellied out by the expansion of gas within. The only possible source of this gas is decomposition of the contents, and a “blown” tin therefore contains putrid meat or fruit as the case may be. Some tins are actually burst by the force of expansion of the contained gases.

Rice.—The grains should be clean, unbroken, free from grit and foreign matters.

Peas and Beans should be clean and hard, and free from the holes bored by insects.

Potatoes should be of good size, firm, and free from disease. The only way of testing the quality of potatoes, besides the crucial test of cooking and tasting them, is by taking the specific gravity, which should be at least 1100. The more the specific gravity exceeds this standard, the better the quality of the potato.

CHAPTER XI.

FOOD—STORING AND KEEPING.

Meat.—Every asylum ought to have an efficient ice cupboard or ice room in which to keep meat. Such a room is very easily made, and is most efficient. In sultry and thundery weather in summer it will in a single day save a large portion of its cost by keeping sweet meat that otherwise would become unfit for food.

The ice room is made with double walls of match boarding, the interval, of about 6 inches between the walls, being filled with sawdust. The roof is composed of a number of parallel troughs, 3 inches wide and 1 inch apart. These troughs drain into a transverse trough which runs under one end of each. Under them, and parallel and alternate with them, is placed a second row of somewhat smaller troughs, similarly drained.

Upon the upper troughs is placed a pile of ice. The water from the melting ice is carried away by the troughs, and any which drops through the interstices between the upper row of troughs is caught by the lower row. The air, cooled by contact with the ice, falls through between the troughs into the interior of the room, and maintains a constant circulation therein. Perforations in the walls at the base provide for the escape of air from the chamber. The frequent renewal of air in the chamber is an important matter.

Tea requires very careful storage in order to preserve its delicate aroma and flavour. It resembles milk in the readiness with which it absorbs odours from the air in which it stands. It ought, therefore, to have a portion of the stores to itself far from the place in which the cheese, soap, and other strong smelling wares are kept. Tea is packed in air-tight cases of sheet lead enclosed in wood; and so long as the lead remains unopened and sound, so long the tea is preserved from deterioration. No sooner, however, is the lead covering broken into than the tea begins to deteriorate. It not only absorbs any foreign odours that may come in contact with it, but when exposed to the air its own peculiar and fragrant odour becomes dissipated. For this reason tea should always be supplied in packages of such size that when once broken open they are rapidly used up, and not in such gross bulk that it has to stand long exposed to the air. It does not follow, however, that tea which has not been opened will remain without deterioration; for the leaden foil which encloses it is very thin, and, although secured from mechanical injury by the wooden chest which contains it, is yet open to perforation by more subtle and less preventable agency. It has been found that some of the kinds of wood of which tea-chests are made have properties which render them destructive to the lead which lies in contact with them, at any rate under certain conditions, probably of atmosphere and moisture. The consequence is that tea packed in chests of this kind acquires an offensive smell, and is entirely ruined. The condition of the tea may be recognised before the lead casing is opened, if the inner surface of the wood is found in places to be coated with white powder—it may be only in minute specks—and the lead opposite to these places to be perforated with fine pin-holes.

If, however, tea is, for the sake of economy, purchased in larger

quantities than can be rapidly used, it must not be left in the open chest, but be transferred to a tin receptacle *with an air-tight lid*. If the lid merely shuts down or fits on, the tea might almost as well be left in its original chest. The lid must be made absolutely air-tight by one of the several methods now so extensively employed for the purpose, must be kept shut, and must have painted on the lid both inside and outside, that it may be seen both when the lid is closed and open, the instruction, "This lid to be kept shut."

Coffee should be supplied in the berry, ready roasted, and in air-tight tins. It should be kept in a similar receptacle to that used for tea, and ground daily as required. There is not usually in asylums any lack of patients who can perform the simple labour of turning a coffee-mill, and if there be, it is easy to gear the mill on to the shafting from the engine. In any case the coffee should be ground daily, for the great superiority of coffee so prepared over that which has had time to lose its aroma and strength, by being ground weeks or months before it is wanted, is indisputable.

Cocoa, Mustard, Pepper, and Spices of all sorts should be similarly kept in air-tight cases, opened only as required.

Tinned Goods should be stacked in heaps, with the tins lying on their sides, and only one tin in thickness. With the ends thus exposed any tin that becomes "blown" can be immediately seen and removed.

Milk has an extraordinary power of absorbing every odour and vapour that comes in contact with it. It is quite impossible to keep milk fresh and sweet within measurable distance of any odorous substance or any source of vapour. It must therefore be kept in a dairy, quite removed from the stores and the kitchen, yet accessible from the latter. Milk pans and cans, and every utensil employed to contain or come into contact with milk, must be thoroughly scoured and scalded every day in the following manner. First rinse with cold water, then thoroughly scour with scalding water, finally rinse again with cold, and place in a current of air to dry. To this practice there must be no failure or exception.

Butter, like all greasy substances, is a powerful absorber of odours. So powerful is this quality of absorbing odours that fats are employed in the manufacture of perfumes, to extract from flowers the odorous essence, which is subsequently dissolved out by spirit. Hence it will appear how important it is to keep butter away from strong smelling substances. Butter deteriorates if kept under water, but more slowly if the water has been previously boiled. It will keep longer if the water be slightly acidulated with acetic or tartaric acid. The proper way to preserve butter is, however, to keep it in an ice cupboard into which no other odorous substance is admitted. Butter which has become rancid may be sweetened by washing and kneading it thoroughly in new milk,

which dissolves the butyric acid on which the rancidity depends, and subsequently in water.

Cheese is apt, though less apt than butter, to pick up odours, and is liable to the attacks of mites and of weevils. The latter in their larval stage are the "maggots" which are so common in the cheap cheese supplied to patients in asylums.

Potatoes should be kept in a dry cool place. Before laying them down the floor should be sprinkled with quicklime, and as they are stored quicklime should be from time to time scattered over them in the proportion of about 1 bushel of lime to 40 bushels of potatoes.

The food is issued from the stores to the kitchen as follows. In every ward is kept a diet sheet, containing a list of the different diets, and opposite to each diet the number of patients to whom that diet is ordered. These sheets are revised daily according to the alterations made by the medical officer, and sent to the steward's office. Here are kept diet summaries for the whole asylum, or for each block, as the case may be, on to which are copied the numbers given on the ward sheets. These numbers being added up, give the amounts required daily to be issued from the stores, and this diet summary is accordingly passed on to the storekeeper, while the ward sheets are sent with a copy of the summary into the kitchen.

When the food reaches the kitchen it has to be cooked, and this is a matter in which there are few asylums that do not need to be improved. Of course the enormous quantities of food that have to be cooked every day put out of all possibility the minute and careful attention that food gets in a private establishment at the hands of a competent cook; but still, with efficient apparatus and enough assistance, the dinner even for the patients of a large asylum should be capable of being placed before them in a palatable form. The fact is, that private cooking and cooking in institutions are two totally different things, and it is quite possible for a cook to be thoroughly proficient in an ordinary kitchen and capable of sending up an artistic and excellent dinner for a dozen persons, who is yet absolutely ignorant of the nature and management of the large and complicated apparatus in use in large institutions, and quite incapable of cooking a decent meal by their means. Moreover, the different forms of apparatus made by different firms are often widely different in their principles and mode of management, and require a special course of instruction before they can be used to the best advantage. To this cause are to be attributed, no doubt, many of the failures of asylum cookery.

CHAPTER XII.

SERVING.

EVEN when the food is good and the cooking efficient, a meal is not palatable unless well served, and may, by bad serving, be made repulsive. To have the portions carved and put on the plates, the plates thus filled piled on top of one another and carried through passages and corridors until the meat is cold and the gravy congealed, and then to be placed before the patients, is a method of serving which is enough to disgust a hungry person even with good meat well cooked. It is, however, a plan by no means unknown in asylums.

To have meat well served, in the first place, the servers must be sufficient in number. Only by having plenty of servers can the patients have their meat served to them hot and tidy, and with some regard to their individual tastes. The patients should be divided into groups of not more than fourteen, and to each such group the same attendant should always minister. In this way each attendant will soon get to know the individual taste of each patient, and will supply him with well-done or under-done, fat or no fat, outside or inside, according to his idiosyncrasy. Where it is necessary to carry the meat for any distance before serving, it should be taken in the joint in a closed wagon properly covered, so as to retain the heat. Where it is absolutely necessary to carve the meat at some distance from the ward in which it is served, the plates should be placed singly on trays, which are then slid as shelves into a closed wagon, and wheeled to their destination.

The great question of potatoes peeled or in their jackets is one which is differently answered in different asylums. For demented patients there is no question that the potatoes should always be peeled. For the bulk of the patients it is not of so much importance. On the one hand, the operation of peeling occupies a little time, and prevents the patients from gulping down their food with the ravenous voracity with which they are apt to consume it; and it saves a large amount of labour in the kitchen. On the other hand, the operation, as conducted at table, is not cleanly, especially with hot meat, when the potatoes have been dipped in gravy: it gives the tables, littered with peelings, a very untidy appearance; it dirties the table-cloths, and what is more important, it leads to potatoes that are defective and diseased being sent to table with all their faults upon them, disgusting in themselves and a source of contamination to the other tubers. In addition to these

drawbacks, the peel of the potato, when thrown on the floor, as some of it always is, is more slippery and dangerous than orange peel, and is a fertile source of falls when patients are leaving the tables. On the whole, therefore, the arguments are greatly in favour of having the potatoes peeled before being cooked. This will, it is true, entail much labour when the peeling is done by hand, but labour in asylums is cheap, and there are apparatuses in the market by which the peel can be removed with great rapidity.

The machine made by Messrs. Hancocks of Dudley rasps the peel off the tuber by means of a revolving brush; it is very rapid in its action, efficient, and economical. It does not take off a thick slice, but merely removes the skin. It is made for either hand or steam power.

The table furniture should be slightly and sufficient in quantity. In this, as in other matters, the standard maintained in the asylum should not be lower than that which prevails in the patients' own homes. There are few homes even of the poorest labouring classes in which a single tin mug set on the middle of the table has to serve the whole family at dinner; yet instances are not unknown in asylums of such an arrangement, half a dozen patients having a common drinking vessel—a very common one. Glass tumblers are cheap enough. They can be obtained for 1d. or 1½d. each; they are comparatively rarely broken, even by refractory patients, and they ought on every account to be supplied for the use of patients in asylums, and supplied in sufficient quantity for every patient to have one to himself.

Plates should be of earthenware. It is common for enamelled iron to be used in asylums both for plates, mugs, and other utensils, but its use is not satisfactory, for although practically unbreakable, light, and, when new, clean and neat, yet no means has yet been found of making an enamel that will expand and contract equally with the metal under variations of temperature. The consequence is that the enamel soon scales off, and leaves the iron bare. The utensils are then not only very unsightly, but the bare surface of the metal is rough, so that the contents of the vessel adhere to it, and it becomes very difficult to clean the article effectually. Each viand or liquid that the utensil is used for thus becomes flavoured with the remnants of its previous contents, and the result is not appetising.

Ordinary knives are now considered appropriate for general use in asylums. They are not, of course, kept very sharp, and in some wards or with some patients it may still be considered expedient to use the dummy knives which were so common years ago. These are blunt on both edges, with the exception of about two inches near the end on the front edge. Their use is to be restricted as much as possible, for the portion which is supposed to be sharp is rarely much better adapted for

cutting than the remainder, and their use, besides being exasperating from their inefficiency, is a continual reminder to the patient that he is not trusted.

Forks should, of course, not be steel. Nor should they have their prongs webbed to within a quarter of an inch of the points, as the over-anxiety of some asylum managers has prompted to be done. I know of no case on record in which injury has been inflicted on a patient, either by himself or by others, by means of an ordinary white metal fork, and there is no reason therefore why such forks should not be supplied for the use of patients. The webbed forks are open to precisely the same objections as are made against the dummy knives. They are a continual reminder to the patients that they are exceptional persons, to be treated by exceptional means, and are thus opposed to the whole spirit of the modern treatment of insanity.

Salt, pepper, and mustard should be supplied, and, for all except quite demented patients, should be placed on the table that they may help themselves.

Grace should be said or sung before and after every meal, and patients should not be allowed to begin their dinner until grace is concluded. A collection of musical graces may be obtained of Messrs. Novello & Co., published in Novello's *Glee Hive*, vol. ii., No. 34, price 1½d.

The attendants should be instructed to place the plates before the patients in a decent and orderly manner, and not to fling them down roughly, as they are apt to do.

At breakfast and tea, mugs are used made of earthenware, and not of enamelled iron.

When a large number of patients take their meals together in a dining-hall, a medical officer should be present at dinner-time to supervise, to see that the dinner is properly served, to hear complaints as to quantity or quality of food, and to be on the spot in case of choking.

EXTRA DIETS.

When it is remembered how extremely monotonous the ordinary diet of asylums necessarily must be, it becomes additionally incumbent on the managers to secure as much variety as possible in the only department in which much variety can be introduced—the special diet. In many recent cases of insanity the question of feeding is all important, and efficient or deficient feeding may make all the difference between life and death, or between speedy recovery and a long existence of confirmed dementia. Now, efficient feeding demands variety of food. No matter how tasty and savoury a dish may be, an invalid will tire of it after a very few repetitions, and when, as in so many cases of recent insanity,

the appetite is deficient, and the difficulty of getting the patient to take proper nourishment great, it is in vain to offer day after day the same food, for which the patient has already conceived a positive loathing. Few things are more important in the treatment of recent insanity than the command of a varied *cuisine*. How inadequate are the ordinary resources of public asylums to demands of this nature it is unnecessary to explain. The medical officers have no doubt plenary power to order what they please, and no doubt any viand that they might order would eventually be forthcoming, but after how much delay? and at the cost of how much dislocation of the ordinary routine of the institution? Moreover, it is a fact that the mind of the medical officer is apt to run in grooves. The things that he is accustomed to order occur readily to his mind, and a thing which is only to be obtained with delay and difficulty is very likely not to be ordered at all. It is not to be expected that the varied resources of a fashionable restaurant should be contained in a public asylum and at the service of the pauper patients, but it is desirable that a patient whose life or whose reason may depend upon the tempting of a capricious appetite, should have some choice beyond a chop, a steak, and a custard-pudding. There are a number of cheap and tasty dishes to be found in every cookery-book which would require no addition to the stores of the asylum nor any complication in the distribution or book-keeping. All that they need beyond what is found in every asylum is the skill of a moderately good cook and the time of a moderately industrious cook. With milk, bread, butter, flour, eggs, rice, sago, arrowroot, lemons, currants, and spices, an endless variety of dishes can be made, and a patient's appetite coaxed and humoured into indulgence in them. Why should not a number of these dishes be added to the culinary *repertoire* of every asylum? They take a little time to make, it is true, but then it must be remembered that after the mid-day meal the cooks of an asylum have scarcely anything at all to do. Making the tea and coffee occupies no time. The bread is cut by the attendants. The cooks have nothing whatever to do but to prepare the dinners of a few officers. In order that the tastier dinner of the sick patient should not clash with the general dinner, it might be given always in the afternoon or evening, so that the cook would not need to pay attention to it until the great task of the day is over. But when the cook is set free by the completion of this task, then I do think that it ought to be within his or her capacity to prepare something more tasty than a plain chop, a plain steak, or a plain custard-pudding for the sick patients in the asylum. This is not a cookery-book, nor does it enter into my province to give recipes for the preparation of any dish, cookery-books being now as abundant on the trucks of the Whitechapel second-hand booksellers as sermons and books of theology; but the following list will

serve to prove my position that nothing but moderate skill and moderate industry is necessary to introduce very great variation into the extra diets of asylums. Of course all these dishes need not be prepared every day, but all ought to be at the service of the medical officers, should they see it advantageous to the patients to order them. The best way would probably be for the cook to send to the medical officers daily a bill of fare of the extra dishes that would be available on that day. The medical officer could take this round the wards with him, and could give some patients their choice, and exercise his discretion with regard to others. In this way the patients would get far more variety of food; the medical officers would have more efficient means of treatment placed in their hands; the cooks would be kept more fully employed; and stagnation would be prevented all round.

Suggestions for Extra Diets.

Fish.—Portions of the fish could be fried, boiled, stewed, or sautéd. Remains of boiled fish could be made into pie, kedgerée, or fish-cakes, or curried.

Chops could be cooked as cutlets, hashed, haricoted, stewed, minced, made into rissoles, into puddings or pies, or potato-pies or oatmeal-pies, or goblet-pie.

Beef.—Could be braised, stewed with plenty of vegetables, shredded, minced, made into pie or pudding, or potato-pie, or sea-pie, or rissoles.

Bacon.—Chopped and fried with onion and cabbage; with potato; made into pie with potato; cut thick and broiled like ham.

Vegetables.—Potatoes might sometimes be fried, sometimes mashed, made into salad; carrots, beetroot, parsnips, turnips, beans, &c., unused and left cold, could be chopped and made into salad, or fried.

Puddings.—Of these, as has been said, an endless variety may be made with the simple ingredients already supplied in every asylum.

Arrowroot shape, blanchmange-pudding, batter-pudding, bread-pudding, bread and butter pudding, Cambridge pudding, Canary pudding, Castle pudding, currant-pudding, ground rice, sago-pudding, hasty pudding, jam-pudding, jam turnover, jam roll, Norfolk dumpling, oatmeal-pudding, pancakes, paste cakes, boiled rice, baked rice, rice fritters, suet-pudding, treacle-pudding, treacle-pie, Yorkshire pudding, macaroni-pudding.

Not one of the above dishes is difficult to make; not one requires any but the simplest ingredients; not one is expensive; and any cook who is unable to make any one of them is simply unfit for her place. It is to be remembered that a lunatic asylum is, in respect of food, unlike a hospital for the bodily sick, for in the latter only the lightest and most easily digested diets, and the most concentrated, are required, while in the former it is often important to administer a large bulk of food. Hence, in enumerating the dishes above given, regard has been had not to the bodily sick only, but also to those who are bodily well but disinclined to eat.

Patients who snatch food from others should be placed at small single tables by themselves. Demented patients and filthy feeders should not

be placed at the same table with intelligent and cleanly patients. The tables of the latter should be decorated with flowers.

Bibs should be provided to tie or button round the necks of unclean feeders, and care should be taken to see that they are used.

CHAPTER XIII.

CLOTHING.

THE clothing of patients is a most important matter, and the asylums in which it is satisfactory are very few. In one or other of the following essentials the clothing of the patients is deficient in nearly every asylum. The essentials are as follow :—

1. It must be adapted to the temperature—warm enough in winter and cool enough in summer.
2. It must be durable.
3. It must be washable.
4. It must be sufficient in quantity to afford the necessary changes.
5. It must be chosen with some regard to appearance.
6. It must, among the different patients, have sufficient variety.

It will be convenient to take separately the clothing of the men and of the women.

WOMEN'S CLOTHING.

Dresses.—Women's dresses should be of two kinds—print for the summer, and some warmer material for the winter. The print should be stout and strong, and in abundant variety of patterns. Lilac looks the commonest, and is the colour that washes best ; it is therefore best fitted for patients of faulty habits. Dark prints of other colours besides lilac do not wash well, and should not be selected. The other colours should be light, the size of the patterns varying with that of the wearer.

For winter dresses the material usually selected is winey, and a more inappropriate material would not be easy to find. It is harsh in texture, and therefore less warm than a softer material. It wears badly, soon becoming white wherever it is exposed to friction. When wetted it creaks, and after washing it loses its shape, and looks extremely shabby. Much better materials are flannel and serge, and those known as homespun and berge, which are warm, wear well, do not easily lose their shape, and can be cleaned and washed without great deterioration. Dresses of these materials will last for two winters. At the end of the

first they should be washed and put away. After they have been worn for two winters by sensible patients, they can be taken to pieces and remade for patients of faulty habits, and in this way can be worn for altogether eighteen months.

Dresses should always be made with some consideration for the figure of the patient who is to wear them. It is far too much the custom in asylums to make the dresses in the gross, and serve them out without regard to fit, and with very little regard to size. No custom could be devised more destructive of those feelings of self-respect in the patients which it should be the first duty of asylum officials to inculcate and foster. A perfect and fashionable fit is not to be expected, and the necessity of economising time and labour in the making of dresses must be recognised and insisted on, but means should certainly be taken to secure that there should be some harmony between the shape of the dress and the figure of the wearer, and that the grotesque misfits that are sometimes seen should be prevented. Patients who are able to do so should be encouraged to work upon their own dresses, and aided in their endeavours to make them more tasty and becoming. Instances occur in asylums in which all effort of this kind is discouraged, and even forbidden. Such prohibitions are utterly wrong.

Dresses should not be entirely plain. Some sort of ornament in the shape of coloured braid, fancy buttons, trimmings of various kinds, should be provided. A dress which terminates with severe plainness at the neck and wrists is not becoming to many women. Bits of cheap lace may be inserted at these positions at little trouble and less cost, and will do much to improve the appearance of the patients. Those who will crochet or otherwise work collars and other ornaments for themselves should be allowed and encouraged to do so, and, moreover, should be suffered to wash them out themselves and retain possession of them.

Winter dresses of demented patients should not be below their ankles, so that they may not get them plastered with mud when walking.

Of **petticoats** every woman should be allowed at least two. The under one should be of flannel, and the upper of wincey or similar material in winter, and of jean in summer.

Stays should, of course, have neither laces nor steel busks, both of which offer facilities for suicide. Buttons should be substituted for laces, and the busks should be of wood or whalebone.

For their **undermost garment** the women in almost every asylum have to be content with a chemise, drawers not being provided. This is in many cases a cruel deprivation, and one that is deeply felt. There is no reason at all why this state of things should be continued. The reason of its continuance is no doubt the desire to save, in the first place, the

cost of the garments themselves, and in the second place, the extra labour of washing so many more articles every week. The difficulty could, however, be easily met without incurring either of these disadvantages. The chemises usually provided are of great length and amplitude, commonly reaching to the wearer's feet, and being many sizes too large for her. Out of the same quantity of material it would be easy to make a combination garment, uniting chemise and drawers in one piece. This would involve scarcely any more cost or trouble in the making, and none in the storage, counting, or washing, and would enhance the comfort, contentment, and self-respect of the wearers to an extent quite incalculable.

It would seem unnecessary to insist that the **stockings** supplied to the wards should not be all of the same size, but it is an undoubted fact that this is the case in some asylums, so that those patients who happen to be below the maximum have to wear their stockings with the toes doubled back under their feet—a custom which is not productive of either comfort or contentment, and which does not contribute to the taking of the amount of exercise which is so necessary and so beneficial to asylum patients. It is very expedient that the summer and winter stockings should not be alike of the same material, but it is perhaps utopian to expect that they should be so provided. It may, however, be remarked that knitting-machines may now be procured for a small sum, and a patient instructed in their use can turn out two dozen pairs a day, which may be made of strong well-wearing worsted, and prove a great benefit, especially to the aged in cold weather.

Boots are usually of two kinds—leather for the hard workers and those who walk abroad, and cloth galoshed with leather for those who spend most of their time in the wards and the airing courts. The cloth boots should be buttoned. Leather boots are often laced, but this is wrong, laces offering a manifest facility for suicide, and, besides, continually breaking. Buttons, too, are very apt to come off leather boots. They should be fastened with straps and buckles. For patients who persist in taking their boots off, the fastening will be a lock. Slippers of hemp, list cloth, and leather should be provided for working patients to substitute for their heavy boots at the end of the day, and for those who dance.

Hats and Bonnets should be varied in pattern and colour, and trimmed in different ways and with ribbons of different colour. To see several hundred patients all with hats the shape of an inverted saucer, of the same coloured straw, trimmed with ribbons of the same colour and width, arranged in precisely the same way, is not an inspiring sight, and should not be permitted in any well-managed asylum. Demented and destructive patients who destroy straw hats should be

supplied with sun-bonnets. The front of the sun-bonnet should be made double, with an opening like that of a pocket into the interior, the opening to extend from ear to ear. A piece of buckram or stiff brown paper can then be inserted into the pocket so as to stiffen the front of the bonnet and keep it from flapping over the face. The opening of the pocket can be buttoned or sewn. These bonnets should be fastened with strap and buckle, or lock, and not tied with strings, which are open to the common objections to strings, with the additional disadvantage that they are continually getting into inextricable knots.

For the winter, patients of this class should be supplied with hoods of coloured flannel, which are both warm and sightly.

Elderly patients should be supplied with caps, not all of the same pattern.

For patients who strip themselves at night should be made a strong combination garment of moleskin, a material which is fleecy on one side, is thick and strong, but supple, and does not chafe the skin. The legs of this garment should be long enough to enclose the feet, and should be shaped to them like stockings. The sleeves also should be long, and while loose at the elbow to allow of it bending easily without compressing the limb, should fit closely to the forearm, so as not to suck up and leave that portion bare. This garment should fasten with locks at the shoulders only. If fastened in any other place, it will infallibly cause bedsores. It must therefore be made to be drawn on from the feet upwards. Care must be taken that the garment is long enough from the shoulders to the fork, or it will cut in the fork badly. At the same time it must not be very much too long, or the wearer will be able to get her legs out.

Shawls should be provided for outdoor wear in cold weather, and these shawls should not all be of red and black or white and black check.

No obstacle should ever be put in the way of the supply of clothes to patients by their friends. Nothing can be imagined better calculated to satisfy a patient and conduce to her contentment and well-being.

The **quantity** of clothing supplied should be sufficient to allow every patient clean underclothes twice a week. If the combination garment that is here recommended is used, it will be worn in the daytime only, and will last a week; but then a nightdress must be supplied, which also will last a week. Two print dresses should be allowed to each patient, one for wash and one for wear, to be changed fortnightly. Two of each kind of petticoat will be required, to be changed fortnightly on alternate weeks. For patients of faulty habits these numbers must of course be considerably exceeded. In the stores should be kept a stock of clothing equal to that in the wards, that is to say, to each

patient two of every garment, of which two are required to be kept in the ward, and one of each of which one is to be kept.

Patients who dribble should be supplied with comprehensive **pinafores** to prevent them from spoiling their dresses.

MEN'S CLOTHING.

For the ordinary clothing of male patients there is nothing better than corduroy. It is cheap, it is extremely durable, and it can be washed without suffering deterioration. Moreover, it can be obtained in several colours and of several thicknesses of rib, so that extreme sameness in the clothing of the patients can be avoided. The drawback of corduroy clothing is that, being composed entirely of cotton, it is not as warm to wear as the thickness of its substance would lead one to expect. It is, on the whole, however, undoubtedly the best material, at any rate for trousers.

Trousers should for the most part be of the ordinary pattern, but for patients who expose themselves and behave indecently, the customary fly should be abandoned in favour of the old-fashioned flap, which, fastening under the waistcoat, may have locks affixed without these adjuncts becoming conspicuous.

For patients who work on the land, **knickerbockers** with gaiters may be advantageously substituted for trousers. They are much more comfortable and less fatiguing for laborious work, and are of course very much cleaner.

Coats are usually made of one pattern, a pea-jacket, that being the simplest and least expensive to make, and being convenient and sightly. A certain proportion of coats might, however, be made in the shape of a "morning coat," which is not much more elaborate, and which would import a little much needed variety into this article of the dress of male patients.

Waistcoats are usually of one pattern, and with regard to this garment there is little to be said.

Shirts are made of flannel or of twilled cotton, in either case having the collar attached.

Undershirts should be made of flannel, some with and some without sleeves. They should not button down the middle, but on the left side, thus breaking joint, in builder's phrase, with the waistcoat and coat.

Drawers also should be of flannel, and should button at the knee, and not tie with tapes.

Every patient should have two clean shirts a week. Those who wear undershirts and drawers should change them weekly.

Patients who denude themselves of clothing by night should wear combination garments made as described for women. Those who undress by day may also have a combination garment of trousers and waistcoat in one, fastening down the back. Patients who persist in wearing their waistcoats open should have them sewn at the top button and the fourth button. If they break the stitches, they must have waistcoats which fasten behind.

Neckties should not be made for the patients to tie themselves, as such ties can be used for the purpose of suicide. They should be made up in various forms of bows and knots, and be of various colours and patterns. This is almost the only article of male clothing in which wide variety is possible, and the variety should therefore be studied to the utmost.

Boots.—Ankle-boots with strap and buckle are the best for all purposes. Cloth boots with thin soles must also be issued for dancing, for patients who kick, and for indoor wear. Slippers of jute and list and other materials should be provided for working patients to change into on coming in from the land and before entering the wards.

Overcoats or Capes should be provided for elderly patients to wear out of doors in cold weather.

Hats and Caps of cloth and felt, varied as much as possible.

Patients whose friends are willing to supply them with clothing or with articles of clothing, so as to save them from the necessity of donning the asylum uniform, should be allowed to receive and wear such clothing.

PART III.

OCCUPATION AND AMUSEMENT.

CHAPTER XIV.

OCCUPATION.

THE occupation of patients in asylums is a matter of continual inquiry and report by the Commissioners in Lunacy, and is, of all the questions upon which they comment, the one upon which their comments on the whole are the least favourable. The asylums on which the reports of the Commissioners on this subject are highly commendatory are very few indeed, and it is, in fact, one of the departments of asylum management that receives least attention, and is consequently least efficient. Yet of its extreme importance for the well-being of the patients there can be no question. Even if the inmates of asylums were sane, the intolerable sameness and ennui of their lives would imperatively demand that some occupation should be found for them, even if only to relieve the tedium of the long hours, and to provide the necessary exercise of body and of mind. But when it is considered that the inmates are insane persons, that to them employment is not merely a means of passing the time, but is also a most important means to improvement and recovery, it becomes apparent that the provision of sufficient occupation for the patients becomes one of the foremost duties of the managers of asylums.

The provision of occupation for insane persons is of course attended by its own peculiar difficulties and dangers. The difficulties are, first, the unwillingness of many patients who are able to work; and second, the actual inability, from absence of sufficient intelligence and energy, of a still larger number. The dangers that patients incur in connection with their employment are chiefly, of course, in the character of the tools and appliances that are used in the various avocations that they may undertake—the cutting instruments, the hammers, the ropes, &c.—which may be used for the purposes of suicide or violence. There is also the danger of relaxation of supervision, which can scarcely be maintained in workshops by artisans who are themselves otherwise employed, with the same efficiency as in the wards by attendants who

are required to devote their whole time and attention to the duty of supervision.

However great the difficulties and dangers of employing patients, they must be surmounted, even were they twice as great as they are, if asylums are to be institutions for the treatment as well as for the care of the insane. The whole question of the employment of patients is one which demands constant thought and attention at the hands of the managers of asylums, and by thought and attention the difficulties may in great measure be overcome. The following are some of the ways in which the difficulties and dangers are to be met.

Inducement.—Many inmates of asylums who are able to work are unwilling to do so, and if we listen to their explanation, the unwillingness is not altogether unreasonable. “I was placed here,” such a patient will say, “against my will; I did not come of my own accord; I am under no obligation to facilitate the plans of those who put me here, nor of those who keep me here. My refusal to work is a protest against the deprivation of my liberty. If I were to engage in the work of the asylum, I should in the first place forego my protest, and to that extent admit the justice of my incarceration; and in the second place, by making myself useful to the asylum authorities, I should give them a positive interest in detaining me here all the longer. Besides, why should I give the benefit of my experience and skill free gratis and for nothing to those to whom I am, to say the least, under no obligation? The labourer is worthy of his hire. Before I came here I worked hard and long. I had no objection then to work; and why? I tasted the reward of my labour. I was paid for what I did; and the more I worked, the more payment I received. Pay me here for my labour, and I am willing to work for you.” Such may not be the very words of the patients who refuse to work, but such is the sense and meaning of the answers that are daily received by the officers of asylums who try to induce patients to work; and it is impossible not to admit the reasonableness of the reply. Such reasons for idleness—idleness which is in a high degree disastrous to those who practise it—must be met and overcome. Patients of this class do often at length take to work from very weariness of their idle life; but this is not a motive to be relied on, for in other cases the love of idleness grows by indulgence, until all inclination to work disappears. Moreover, even if they do eventually take to work, they have lost the golden moments, the early weeks or months of their malady, when the beneficial influence of occupation has the best chance of promoting recovery.

To meet the first of the foregoing objections, it should be made plain to every patient that the way out of the asylum lies through the workshop, and that the first step to his discharge is to get into regular

employment. When he sees by the example of others that this is the fact, the first of his objections will be removed.

The next objection, the absence of reward for labour, is a crying evil in nearly every asylum. Reward in some shape, in the shape of a trifling addition to the diet, or in an allowance of tobacco, there is, it is true, in most asylums. But beyond this there is nothing; and this is not enough, nor nearly enough, to reward those who spend, it may be, a lifetime of patient and unremunerated toil in the interior of a lunatic asylum. A very great advance on this system is needed, and it is the very strong opinion of the writer that every worker in an asylum should be paid in one form or another for the work that he or she does therein. It is not necessary that they should be paid in money; and such payment is open to obvious objections. It would place temptations to theft in the way of the attendants and patients to an undesirable extent; and it would afford means by which articles such as knives, scissors, matches, &c., might be purchased outside the asylum by patients, and become sources of danger. Nor should the payments be in kind, as, in so far as there is any payment at all, they are at present. A payment in kind does not satisfy. It deprives the payee of the pleasure of purchasing. It obliges him to accept his payment in a certain form, which may perhaps be distasteful to him, and which he will be sure to consider inadequate. Hence payments should not be made by portions of tobacco, snuff, or tea. The mode of payment that I would recommend is to have a special currency for use in the asylum, say of brass, copper, or leaden tokens or tallies. It would be easy to cut or stamp sheets of brass or copper into tokens the size of a halfpenny or a penny, and, to guard against imitation, to have them stamped with some simple device or number. They might even be made of more than one value, should the system be sufficiently extended. The tallies should be paid weekly to the patients, not necessarily in strict proportion to the actual value of the work done by them, but with some reference to the capability, willingness, &c., of the worker.

The best way would probably be to divide the patients into classes, and to vary somewhat the amount of remuneration in the different classes, as for instance—

1. Ward cleaners and helpers,	.	.	10 tokens per week.
2. Workers on land,	.	.	
3. " in laundry,	.	.	} 16 tokens per week.
4. " in needleroom,	.	.	
5. " in foul laundry,	.	.	} 20 tokens per week.
6. " in artisans' shops,	.	.	

These tallies should be exchangeable at the stores of the asylum for such various commodities as are valued by patients—for tobacco, snuff,

writing-paper, jam, marmalade, cakes, sardines, saveloys, chocolate, figs, honey, sugar, treacle, eggs, and other eatables, ribbons, cheap lace, neckties, harmless scents, handkerchiefs, lead pencils, artificial flowers, and a hundred other things which experience and inquiry would soon suggest. An excellent plan would be to have the jams and other eatables divided into portions of the value of a token, each portion being just sufficient for eating with one meal, and to have these portions on a table in the dining-hall at tea-time, with an official to sell them there and then to those patients who wished to buy. For the other commodities a shop could be opened once or twice a week, their prices should be fixed, one or so many tokens for each article. The face value of the tokens should be low, so that a patient by a week's work could earn a good many of them. He would probably value more a large number of tokens by which he could buy a larger variety of commodities, than a smaller number of the same aggregate value. Probably the best face value for a token (which need not, however, be avowed or marked on the token) would be a halfpenny. This sum would purchase, of the qualities used in asylums, a quarter of a pound of jam, a quarter of an ounce of tobacco, a quarter of a pound of sugar, two quires of note-paper, or a quire and eight envelopes, a quarter of an ounce of snuff, half a pint of beer, and so on.

Working patients might still be allowed beer, or might commute their beer payment into a payment of two tokens per diem. The number of tokens per week that should be paid would, of course, vary with different patients, depending, as aforesaid, partly on the capacity and willingness of the patient, and partly on the value of his work.

Tobacco should no longer be allowed as a payment for work, but should be acquired only by purchase. Patients should be therefore paid a sufficient number of tokens to enable them to purchase as much tobacco as has been heretofore supplied to them, over and above the extra payments now advised. At the usual rate of half an ounce per diem, this would take fourteen tokens per week, and I should suggest that an ordinary payment for patients of ordinarily industrious habits should be twelve tokens over and above this. The entire sum would then amount to the equivalent of one shilling and a penny per week, or, deducting the value of the tobacco already given, sixpence per week, which, considering the amount and value of the work done by patients on the average, is certainly not an extravagant sum.

The collateral advantages of this token system would be many and great. It would supply a disciplinary agent of the most direct and effectual, and of the least harmful character; for it would enable fines to be imposed upon patients for misconduct, a punishment that they would feel as keenly, and that would be without the manifest objections of the punishments now in use. If the associated entertainments are to

be regarded as a means of treatment, then certainly no patient who has shown by derangement of conduct his need of treatment should be excluded from them as a punishment. The system here advocated would have the further merit, and a merit of no insignificant value, that it would enable some extra advantage and reward to be given to those patients who earn such a reward by the amount or the nature of their industry. Those employed in the foul laundry, for instance, and those who have the unpleasant task of cleaning after the dirty patients, could thus be rewarded. That such a system would contribute enormously to the contentment and well-being of the great mass of the patients can be doubted by no one who has had experience in pauper asylums. It would supply to the patients in some small degree what is now so conspicuously lacking in their lives, viz., an object, an aim of some sort. Too much stress can scarcely be laid upon the utter emptiness of the lives of the great mass of patients in asylums. Anything that gives them an object in life, an incentive to exertion, something to which they can look forward, would be the greatest amelioration of which their lives are capable ; and this end would be to some extent attained by the token system. It would hold out to them the opportunity of gaining some advantage to themselves by their own exertions. It would place within their reach things that they now may perhaps dream of, but can never hope to possess. It would give them an incentive to exertion, and would thereby increase the number of patients who employ themselves usefully. It would open to all the working patients the pleasurable excitement of a daily or weekly visit to the shop, would give them in their own eyes and in the estimation of their fellows some degree of that consequence and importance that is conferred by the possession of property. True, the property is not large, but among the blind the one-eyed is king ; and among an assemblage of paupers, not one of whom has a mag to call his own, the possessor of a very trifling amount of purchasing power becomes a person of consequence. Again, a patient of saving habits might be allowed to accumulate his tokens, or a token savings-bank might be established under the care of the chaplain, and an exception to the non-convertibility of the tokens into money might be made on the occasion of the discharge of a patient. Whatever savings he had accumulated might then be returned to him converted into their money value, and thus a very strong additional incentive to work would be provided to convalescent patients waiting for their discharge. It would not, as far as can be seen without actual trial, be open to any objection whatever, save in the sense of the trouble and expense it would involve. The first of these objections is not worth considering. No amount of trouble that can bring any advantage to the patients is to be considered in the management of an asylum ; and, in fact, the actual amount of trouble

involved, when once the system has got into working order, need be very little. The ready-money nature of the transactions would prevent complication and necessitate very little extra book-keeping, and the only extra labour needed would be, first, that necessary for estimating the value of the patients' work and paying them accordingly, a function that could easily be arranged for by means of returns from the various wards, workrooms, and shops; and, second, that necessary for the manning of the shop and the sale of the various articles. This also is chiefly a matter of organisation, and need involve but little extra labour to the storekeeper. Even, however, if it necessitated, as it possibly, though not probably, might, in very large asylums the engagement of an assistant to the storekeeper, the attendant expense would be amply compensated for in the ways to be presently shown. There are, however, few asylums in which a trustworthy patient could not be found to execute whatever extra duties would be thrown upon the storekeeper by the plan under consideration.

Even, however, if the plan should necessitate a considerable increase of expenditure, which it would not, it would still be worth while to adopt it from a purely economical point of view; for it would soon pay for itself by the increase in the number of patients who would be induced to work, and by the increase in the value of the labour of those who are already industrious.

As far as can be judged, the system here advocated, while it provides for the payment of patients, and the enormous advantages which a system of payment involves, entirely obviates all the objections that could be made to such a plan. For it gives the manager of the asylum absolute control over the nature of the articles that the patients can buy, and places no temptations to theft in the way of the attendants, since the tokens would be valueless outside the asylum, and within its walls would be exchangeable only by the patients themselves.

The foregoing argument in favour of the payment of patients was written in ignorance of the fact that a system of payment has long been in force, and has been most successful, at the State Criminal Asylum at Broadmoor. At that institution, containing about 630 patients, a sum of more than £700 is annually credited to patients in return for their labour, and, as will be seen by the following account of the details of the scheme, the profit made by the expenditure of this £700 is several hundred per cent.

At Broadmoor, the value of the patients' labour, of whatever kind that labour may be, whether of skilled artisans, of needlewomen, or of ward cleaners, is estimated as accurately as possible, either by time or by the piece. It has been objected to the system of payment of patients, that the labour of many is of minimal value. And the fact is true, but

it is no objection. The obvious answers to the objection are, first, that however perfunctory the labour, yet, if it serves any purpose at all, it has a value, however small ; and second, that there is no method more likely to increase the value of labour than that of rewarding it, and that the value of those patients whose labour under the present system is minimal will be so stimulated by the prospect of payment that their labour will soon have an easily appreciable value. The labour may be worth no more than a penny or twopence an hour, and yet the labourer may be quite capable of appreciating the stimulus of a payment for it. As a matter of fact, the lowest value that is recognised at Broadmoor is twopence per hour. Whatever the value of the labour, and whether it is estimated by the hour or by the piece, the patient is given credit in the books of the asylum for a value of the work that he does ; not for its full value, but for a value strictly proportionate to its full value—that is to say, for every shilling that his labour is worth, he is credited with $1\frac{1}{2}$ d. A pass-book is issued to him containing a complete statement of the amount of his credit, and this amount he may expend in any way that he pleases, subject to the sanction of the superintendent. He may traffic with other patients, the superintendent being satisfied that the balance given and taken is a fair one ; or he may purchase, by sending in a requisition, any commodity up to the full value of his credit balance. There is no coinage, token, or other ; the whole of the transactions are carried on by means of book credits and debits entered against the names of the patients.

Of course this method necessitates a somewhat elaborate system of book-keeping, and is therefore somewhat expensive in working, in addition to the expense involved in the actual payments. But the fact is indisputable that the scheme is in full actual working, and is a financial success. It is sufficiently notorious that the officials of the Treasury are extremely difficult to satisfy as to the expediency of expending sums out of the national funds. But in this matter they are so fully satisfied that they have continued the system year after year, in the full belief that the sum expended is more than recouped by the increased value of the labour that the patients are thus induced to perform.

For the following forms which are in use at Broadmoor I am indebted to the kindness of Dr. Nicolson, the superintendent of that institution. They do not appear to admit of reduction either in number or in simplicity.

EXPLANATION OF FORMS.

Numbers 1, 2, and 3 are posted up weekly into a book, arranged like form No. 4. This book is made up at the end of each month, and the amount due to each patient is carried to the credit of his or her account

FORM No. 4.

ACCOUNT OF PATIENTS' EMPLOYMENT *for the Month ended* _____ 189 .

Regr. No.	Name.	How Employed.	Value of Labour, or Number of Hours for the Week ending	Total No. of Hours.	Rate per Hour.	Value of Labour for the Month.	Rate Allowed in the is.	Amount Credited to Patient.	Ledger Folio.

FORM No. 5.

ALLOWANCES to PATIENTS and GRATUITIES on DISCHARGE.

ABSTRACT *Account of Patients' Employment for the month ended* _____ 189

No.		Value of Labour.	Amounts Credited to Patients.
	Ward cleaning and Sculleries. Male Division		
	Kitchen, Bakehouse, and Stores. do.		
	Ward cleaning and Sculleries. Female Division		
	In the Kitchen. do.		
	In the Laundry. do.		
	Writing, Printing, Bookbinding, &c.		
	Winding Clocks for the Quarter		
	Miscellaneous labour		
	Making and repairing Uniform. Tailors' Shop		
	do. do. Female Division		
	do. Boots and Shoes		
	do. Patients' Clothing. Tailors' Shop		
	do. do. Wards. Male Division		
	do. do. do. Female Division		
	do. do. Workroom do.		
	do. Bed and house linen. Wards. Male Division		
	do. do. do. Female Division		
	do. do. Workroom do.		
	do. Mattresses, Carpets, Mats, &c.		
	do. Furniture, Tinware, &c.		
	Wood chopping, Coal carrying, &c.		
	Carpenters, Bricklayers, Labourers, &c. Ordinary repairs		
	do. do. New Works		
	Kitchen Garden, Terraces and Farm	£	

The sum of _____ pounds, _____ shillings, and _____ pence has been transferred to the account of "Patient Private Cash and Earnings," and placed to the credit of the various Patients entitled thereto.

Approved

*Steward.**Chairman.**Superintendent.*

FORM No. 6.

PATIENTS' PRIVATE CASH ACCOUNT.

Date, _____ 189 .

The undersigned requests that the following Articles may be purchased
and charged to his account.

Quantity.	Article.	Amount.

Sig. of Patient _____

Countersigned by _____

FORM No. 7.

Date, _____ 189 .

PATIENTS' PRIVATE CASH ACCOUNT.

The undersigned requests that the following Sums may be transferred
from his account to the Persons named.

Name of Patient to be credited.	Amount.	In payment for.

Sig. of Patient _____ Block _____

Countersigned by _____

FORM No. 8.

Regr. No. _____ Name _____

Date.	Value of Labour.	Rate in rs.	Received.	£ s. d.	Date.	Expended.	£ s. d.

RECEIVED.

EXPENDED.

		Valuation of Work.	Rate.						

Difficulty from Want of Intelligence.—Leaving now the question of the unwillingness of patients to work, we have to deal with the question of the inability of many to undertake any employment save that of the simplest character. The bulk of these patients are, in all asylums, restricted to the duties of scrubbing the floors and cleaning the wards. These employments occupy their time for a portion only of the day, during the remainder of which they are idle. The question of finding employment for these patients during the remainder of the day, and of finding other occupations for them besides those mentioned, is simply a matter of thought, time, and trouble. Scrubbing floors is, it is true, a simple occupation, and one that is easily learnt, and is therefore within the capacity of very unintelligent persons. It is one, moreover, that has usually been acquired before the entry of the patient into the asylum, and does not need to be taught therein. There are, however, other occupations quite as simple, and others again but little more complicated, which might, with a little industry on the part of the staff, be taught to the patients; thus occupying their time, making them useful, and conducing, in all the ways that occupation does conduce, to their welfare. Even if the operation is not profitable, if the thing that the patient does is no use when it is done, it is better that he should be doing something than that he should spend all his time in idleness. The first object should be to get the patient to employ himself somehow; it may be left to a later stage to direct his occupation into a profitable channel. There are of course some patients who can never be induced to employ themselves, but undoubtedly many who now sit idle in asylums might be induced to take up some occupation if only endeavour was made, sufficiently well directed and sufficiently persistent.

In every asylum there are patients who have the bad habit of tearing up their clothing. Such patients should be provided with rags formed from cast-off clothing, and should be allowed to tear them as fine as they please. The rags thus formed may be given to patients a shade more intelligent to be still further torn up and ravelled out. The charpie which results from this process may be utilised in the engine-room for many of the purposes for which cotton waste is purchased, or it may be used to stuff cushions.

The picking of horsehair is a work which constantly needs doing in asylums, and which needs for its execution but a very low grade of intelligence. The horsehair should have been steamed and cleaned before being given over to the patients, and should then be pulled and picked by them so as to get out all the knots and lumps. Unless the horsehair is first thoroughly cleansed, the process is not only very dusty, but offensive. It is quite likely that demented patients, when first set to this work, and perhaps even afterwards, will not pick the hair efficiently, but will leave a good many lumps therein. It will then need going over again by a more intelligent person, but the primary object, that of employing the dement, will have been attained. This occupation should, of course, not be pursued in the wards.

Another very simple avocation in which unintelligent people may be engaged is that of rolling up little slips of paper. Patients a shade more intelligent may be employed to fold and cut up newspapers into slips from half to three-quarters of an inch wide and four to six inches long. The less intelligent patients should then be taught to roll these slips into little tight rolls. When a sufficient number has been collected, they may be used to stuff pillows for wet and dirty patients. They form a very elastic stuffing, and, costing nothing, can be destroyed when soiled.

Demented men, who decline other occupations, may be made up into large parties of fifteen or twenty or more, and set to pull a horse-roller to which sufficient ropes have been attached to give them hand-hold. Those who will not take hold of the ropes may be enclosed in loops. A large brush-harrow may be made and utilised in the same way, and patients who can do nothing else can push or pull a cart. I have in this way made a first step to employment with as many as twenty-seven patients in one batch, none of whom had done a stroke of useful work for years, and several of whom afterwards became useful in other ways. It must not be forgotten that among the inmates of asylums are some who have not sufficient intelligence to understand a verbal promise of better treatment in return for work. But if these same inmates are once got to work, and then *immediately* receive a reward for their labour, they have sufficient animal intelligence to connect the two things, and will be prepared to work on a subsequent occasion in anticipation of again receiving a reward.

Patients who can neither be verbally taught or bribed to work may sometimes be induced to do so by utilising that imitative faculty of which every one possesses some share. Here is seen the great use of some simple form of *drill*. If a few unemployable patients are scattered among a larger number, all of whom execute some simple movements in obedience to the word of command, the few may at length be induced

to take part in what is going on around them, and to imitate and chime in with the movements of the rest. In teaching drill we must begin with units, twos, and threes, and work up to larger numbers.

Occupations which involve movement of the whole body are, of course, far preferable to those which require movements of the fingers, hand, and arms only, and outdoor occupations are preferable to those pursued under cover. Hence work upon the land is very valuable. It is also very simple, and some form or other of agricultural labour may be found adapted to the capacity of any person who has sufficient intelligence to be employed at all. Digging, hoeing, forking, carting, are operations that are constantly needed, and that usefully employ numbers of patients who could scarcely be employed in other ways. But there is one defect in the arrangement of the outdoor labour of lunatics in our asylums, and that is that it is confined exclusively to males. It is, however, not less beneficial to females, nor is it, in some of its forms, less adapted to their abilities. It is not indeed the custom in this country to employ women in the more laborious of agricultural avocations, although it is quite customary to do so among our Continental neighbours. But there are departments of agricultural labour, such as weeding, the lighter forms of hoeing, sorting potatoes, and so forth, which are certainly not too laborious for women to be engaged in, and which, as I know from actual experiment, the female patients in asylums take to very kindly and execute very efficiently.

A grade above such employments as these are such as crochet, knitting, and netting. Female patients who can crochet should not be allowed to fritter away all their time making trumpery adornments for themselves and for the nurses, though they may fairly be allowed to make a collar and cuffs for themselves. Their ability should be utilised in employing them to crochet warm woollen wraps for the older women, and, more questionably, antimacassars for the chairs and settees in the ward, toilet covers, &c. Men may be taught to net, and the amount of netting needed in most gardens is practically unlimited. Care should be taken that the twine used is of durable quality, or the labour is thrown away.

Needleworkers are never in excess in asylums. They should of course be employed in work proportioned to their skill. Young women who are ignorant of sewing should, if of sufficient intelligence, be taught. Almost any one may learn to work a sewing-machine.

The chief avocations for men are work in the artisans' shop and on the land, the latter employing of course by far the larger number.

The shops ordinarily included in asylums are the tailors', shoemakers', upholsterers', carpenter and joiners', blacksmiths and engineers'.

Mat-making with cocoanut fibre is a very simple employment, easily

taught and easily followed, and in every large asylum there is a constant demand for mats. It requires, indeed, the use of a somewhat formidable tool, but for patients who can be trusted with the handling of this, it is a very appropriate employment.

The laundry and the kitchen are to the women what the artisans' shops are to the men, and find occupation for a large number. The disadvantages of these occupations are that they are not of the healthiest character, and that they give opportunity for a mingling of the sexes which is not without its dangers. These disadvantages can, however, be overcome with care, and undoubtedly the laundry and the kitchen will always be the chief centres of employment for female patients.

In determining the employment that any patient is to pursue, regard should always be had to the previous occupation and condition in life of the individual. It is not uncommon for persons who have occupied a somewhat superior position—for clerks, professional men, artists, governesses, &c.—to find their way to the wards of asylums. Endeavour should be made to find for such patients forms of employment suited to their aptitudes and capabilities. To set them to scrub floors is not merely an indignity but a waste. They may often be found very useful in the stores or the clerk's office. I have availed myself of the services of a patient who was a shorthand writer, who would accompany me through the wards, and was of great assistance in taking notes at my dictation. Patients of certain trades, as for instance bookbinders, sempstresses, turners, tin-plate workers, &c., may, to the great advantage of both themselves and the asylum, be allowed to practise their trades.

There is one form of employment on the land which does not appear to have been tried, but which is certainly well worth a trial, and that is the cultivation by a patient of a small allotment of land for his own behoof. Interest in gardening is very widely diffused, and will certainly be found to exist in a considerable number of patients. This interest might be at once encouraged and satisfied by allotting to deserving patients a small plot, if only a rod, of land in some part of the garden where it will be free from the incursions of disorderly patients; and by allowing these patches to be looked on by the patients as their own, to be cultivated by them in their own way. A sufficient number of tools should be kept handy, and seeds and plants should be provided whereby each allottee could cultivate his own salads, his own flowers, and perhaps some small amount of fruit. A currant or gooseberry bush or a raspberry cane might be allowed to each allotment. The patients could be allowed to cultivate these gardens of their own at odd times,—on Saturday afternoons, between the hours of eight and ten in summer, and perhaps on another afternoon a week specially allowed for the purpose. The beneficial effect of working on the land is sufficiently notorious in

the case of the insane, and the absorbing interest of one's "own garden" is also a matter of common knowledge and experience. A system in which the outdoor exercise of gardening is combined with the salutary influence of the sense of property and of the interest of seeing and enjoying the fruits of his own labour, would, I am confident, be of very great value in the treatment of insanity and the management of insane persons. That the plan would involve a little extra trouble is unquestionable, but the principle assumed throughout the whole of this book is that extra trouble is not to be taken into account where the welfare of the patients is involved.

The **dangers** connected with the employment of patients in lunatic asylums are undoubtedly grave, but of course they have to be met, and with care they can be efficiently guarded against, as is shown by the rarity of the accidents that occur.

The dangers are mainly of four kinds :—1. Danger from the use of tools. 2. Danger from looseness of supervision with respect to (*a*) the health ; (*b*) the security ; and (*c*) the intermingling of the patients.

1. *Danger from the use of tools* is one against which stringent precautions must be taken. In the bootmakers', the carpenters', the upholsterers' shops are cutting tools that may be used, and that have been used, for the purpose of suicide. In the smiths' shop, the engineers' shop, and in the garden and farm are many varieties of tools—hammers, chisels, hoes, and spades—that may be used, and have been used, for the purposes of violence. These tools cannot be "guarded." They cannot be made as "dummies" in the way that table-knives can be guarded and made as dummies. To be efficient as tools, they must retain all those qualities which render them dangerous as weapons. The only precautions that can be taken with respect to them are, *first*, to exercise the utmost caution in selecting the patients that are allowed to have access to them ; and, *second*, to ensure the safe custody of the tools when work is over. No patient must, therefore, be allowed to be put to any form of employment out of the wards except by the direct sanction of the medical officer, which, for the protection of his subordinates and the prevention of mistakes, should be in writing ; and every tool that could be concealed about the person and used as a weapon must be counted and locked away when the work is done.

2. *Dangers from relaxation of supervision*.—It is inevitable that the supervision of working patients should be less vigilant than that of patients in the wards. The very fact of the patients being out of the wards and among the workers proclaims that they belong to a class needing less supervision than the rest, and the persons who have charge of them—the artisans—are necessarily themselves employed about their own work, and have not the same free attention to give them that can

be given by attendants. Hence the industrial employment of patients is necessarily attended by certain dangers. The chief of these are—

(a.) *The danger to security.*—Most of the escapes that take place from asylums are from working parties or from walking parties. Escape is not a very serious matter in itself, but it becomes very serious from its frequent association with suicide. It is the suicidal patients who make the most frequent and persistent efforts to escape, their object in eluding supervision being to obtain opportunities for suicide. The way to meet this danger is to take care not to intrust too large a party to the supervision of any one attendant. The actual number to be intrusted to the care of one attendant or artisan cannot be stated with accuracy, since much depends on the conditions of the work. One man can efficiently supervise a large number of patients who are extended in a single row in the middle of a field hoeing or digging, and another can efficiently supervise a large number seated on the same bench; but where the conditions of employment require that the patients should be scattered, should be moving about irregularly in different directions and among intervening objects, it is evident that the number that can be efficiently supervised is much reduced. Probably no man should be required to take charge for the whole of the working hours of the day of more than twelve patients, though under special conditions, as instanced above, he may be able to supervise a larger number for a short time. And there are circumstances under which one man cannot satisfactorily supervise more than one or two. Much will also depend on the character of the patients, and no rigid rules can be laid down.

(b.) *The danger to health.*—Several casualties have occurred in asylums from patients being put to unsuitable work or being put to work in an unsuitable condition.

These casualties provide another reason for the necessity of the employment of patients being fixed and ordered by the medical officer. The rule against the employment of epileptics in dangerous situations would then be in less danger of violation. Another rule which would go far to prevent accidents of this class is that, before going to work in the morning, all working patients should be inspected by one of the medical officers. Any patient who was physically or mentally unfit for employment would then be ordered back to his ward.

(c.) *The danger from mingling of the sexes.*—This danger is by no means imaginary, for several notorious cases have occurred in which female inmates of asylums have become pregnant and given birth to children. These cases have occurred either in the laundry or the kitchen, the places in which male and female patients are commonly employed together, and therefore arrangements should be made to secure that either the sexes are kept entirely separate, or else that by no possibility can they escape from supervision.

In order to guard against these dangers and to keep the medical staff completely informed of the way in which the patients are disposed of during the daytime, the head attendant should submit to the superintendent daily lists of the names of the working patients, with the names of the attendants or artisans in charge of the several gangs.

Where a large number of patients work upon the land, an additional official should be employed as extra head-attendant or labour-master, to go round and maintain supervision over the gangs of patients and over the attendants in charge of them. The value of such officials would, in large asylums, be very great. They would be a check upon the attendants at times and under circumstances during which the latter are quite out of the control of the usual head-attendants, and they would exercise a general supervision over the patients also who work on the land, and would bring indoors any one who was taken ill or who proved unmanageable, without the necessity of the attendant in charge leaving his work for the purpose.

CHAPTER XV.

AMUSEMENTS.

THE recreation of patients in asylums stands on a different footing from that of the inmates of other institutions. In the latter it is a matter lying outside the general routine, a matter of exception and of occasion, a matter of secondary importance, to be dealt with from time to time, more or less as a treat and a rarity. But in asylums the provision of recreation is an essential and fundamental part of the administration. It is an important element in the treatment of the patients, a matter for which daily and hourly provision must be made, and without which the asylum will fail of its purpose. Hence in every asylum attention to the recreation of the inmates forms a very important part of the duties of the staff.

The recreations provided for patients may be divided into those that can be pursued in the wards and the airing courts, and the associated entertainments in which the great bulk of the patients take part either as performers or spectators.

RECREATIONS IN THE WARDS.

The first and most necessary of these is the provision of newspapers and books. The supply of *newspapers* should be liberal. In most

asylums it is far too limited. To supply a single copy of the *Daily Telegraph* to a ward containing 100 patients or more is a farce. Even allowing for the considerable proportion of patients who are unable to take any interest in reading, one newspaper to every twelve patients would not be too liberal an allowance. Not only is the supply of newspapers often far too limited, but those that are supplied are commonly appropriated by one or two patients, who keep them to themselves and deprive the others of their use. To prevent this customary practice, the newspapers, or a good proportion of them, should be placed on reading-stands such as are used in clubs, and affixed by means of a rod, so that they cannot be removed. When made to stand independently, these stands are bulky, occupy a great deal of room, and are liable to be knocked over and broken. They may, therefore, be attached to the wall, and may be usefully hinged thereto, so as to lie flat against it when not in use. Made thus, they could not be upset, and would be no obstruction to traffic except when actually in use.

Next to newspapers come *books*. The library, which is usually under the charge of the chaplain, should be kept well supplied with literature, and this should not be wholly, nor even chiefly, in the form of sermons and theological disquisitions. It should contain abundance of novels and light literature. Directions as to the formation and replenishment of the library are given under the head of the chaplain's duties. In each ward should be kept a bookcase, in which the patients could deposit, when they are not using them, the books that they have obtained from the library; and, in addition, a set of books may be kept in each such bookcase for the general use of the ward, such books to be transferred from time to time from one ward to another, so as to maintain a sufficient variety. This set of books, common to the whole ward, may be kept in an open portion of the bookcase, while the books lent to individual patients should be under lock and key, so that those patients may be held responsible for their maintenance in good condition.

Packs of cards, draught-boards and men, chess-boards and men, dominoes, reversi, halma, hopover, pachisi, and similar *games* should be in all the wards. The men or pieces should in each case be placed under the care of one of the attendants, who should keep them in the locked portion of the bookcase, should give them out as required, and be responsible for the integrity of their number.

Bagatelle-boards should be provided, with the necessary balls, which should be kept in the bookcase as above, and cues. Billiard-tables also ought certainly to be provided in every asylum for the use of both patients and attendants. Second-hand billiard-tables are to be had at prices by no means prohibitive, and their power of amusing and occupying the attention of the patients is very great.

These various games should, as has been said, be placed under the care of one of the attendants in each ward, who should be responsible for their integrity and care. And, to ensure this, the men or pieces and the balls should be counted at every stock-taking. The attendant should, of course, count them when he puts them away, and in every box should be pasted a label whereon is set forth the number of pieces that the box should contain. The attendant must be responsible not only for the custody and care of the games, but also for their frequent use ; he must be made to understand that the games are kept to be used, not to be locked up, and that the patients must be encouraged and instructed in their use.

The rules of all these games should be purchased with them, pasted on cardboard, sized, and varnished, and distributed to the wards with the games.

RECREATIONS IN THE AIRING-COURTS.

For the airing-courts should be provided skittles in a proper skittle-alley, quoits, bowls, German bowls, fives, lawn-tennis, and badminton.

Few wards in public asylums are now without a piano, and a very great resource and advantage the instrument is found to be. Now that American organs are so cheap, a few of these instruments also would be a great addition. These instruments are, however, of little value in the absence of any person who can play upon them. If there are no attendants or patients who have this ability, strangers from outside the asylum should be invited and induced to place their services occasionally at the disposal of the asylum. In every parish in this country there is a multitude of young women who are capable of playing the piano with more or less skill, and who are at a loss to know how to employ a great part of their time. Often such persons are in too great abundance for all of them to find employment as district visitors, and could easily be induced to visit the asylum on one or two afternoons in every week to play to the patients.

QUOITS.

The appliances needed for this game are the *quoits*, which must be of soft iron, not steel, nor steel-faced. Quoits may be of any weight to suit the strength of the player, 5 or 7 lbs. being usual, but must not be more than 8 inches outside diameter. Two *pins* or *hobs* are also required. They are usually of galvanised iron, about 15 inches in length, and should not be less than 1 inch in diameter. Any moderately soft loamy soil will do to play on, but where quoits are habitually played, it is as well to have a proper ground made. The pegs are 19 yards apart, and around each peg should be drawn a circle of $2\frac{1}{2}$ feet

radius. Within this circle the turf is removed, and the earth taken out to a depth of 6 inches. If the soil is sandy or of very porous gravel, it is well to take out 9 inches, and put 3 inches of Portland cement concrete at the bottom. In any case the sides are cemented, and the top finished off with the felloe of a worn-out wheel of the proper size, which may be obtained for a trifle of any wheelwright. The felloe should be sunk flush with the surface of the ground, and the whole cavity within it filled with clay—about four barrow-loads of clay will be required, that which has been kneaded and tempered for making bricks being the best. The surface of the clay has a slight slope of about 1 inch from the centre to the circumference, and at the centre the peg projects not more than 3 inches. To make the thing complete, a cover should be made consisting of a wooden or wicker hoop covered with Willesden canvas.

In playing, the player stands level with the pin, and must deliver his quoit with the first step. The quoit is held with the thumb on the convex, and the fingers on the flat side, the forefinger being on the edge and its tip fitting into the notch. The quoit should be thrown with a slight spin, and should fall nearly flat, but with the farther edge downward. Each quoit which is nearer the pin than any quoit of an adversary counts one. Measurements are taken from any part of the pin that is above ground to the nearest part of the quoit. A quoit does not count (1) if it is outside or touching the rim; (2) if it is on its back, unless it holds clay or was knocked out by another quoit; (3) if it rolled before settling, unless it struck a quoit or the pin in alighting. A ringer, *i.e.*, a quoit that surrounds the pin, counts two, unless an opponent's quoit also surrounding the pin lies above it; in that case the upper quoit only counts.

Quoits are usually sold by weight, at about 6d. per lb. The pins are about 2s. 3d. a pair.

BOWLS.

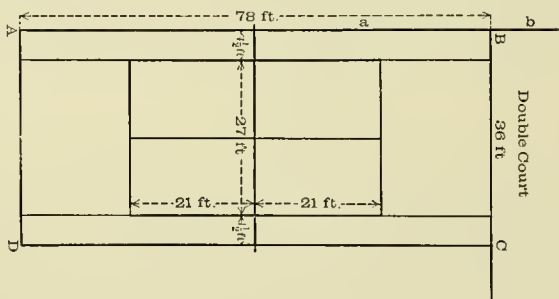
Appliances.—These consist of the *bowls*, usually of lignum vitæ, and of size and weight proportioned to the strength of the players. The bias is now given by the inner half of the bowl being turned flatter than the outer, and not, as formerly, by the insertion of lead at the end of one axis. Four pairs of bowls make a set, each pair being usually a different size from the others. In addition to the bowls is required a *jack*, or smaller ball, spherical, and of different colour from the bowls, usually boxwood. The *footer* is a square of linoleum or oilcloth about 6 inches square, on which the player places his right foot when playing. The *pegs* are two pins, usually of bone or ivory, connected by a twine which

is fastened to one and runs through a hole in the other. They are used for measuring the distance between the jack and the bowls. For the same purpose is sometimes used a *standard*—a length of straw or reed, which is cut to the exact length of the distance between the jack and one bowl. It is then applied to the jack and the other bowl, and if it can be made to rest on both, this bowl wins. The *green* should be perfectly even, free from lumps, worm-casts, and extraneous bodies, and close mown. It should be level.

The first player "sets the mark," that is to say, he throws the jack to a distance which should not be less than 21 yards. The jack should rest not less than 3 feet from the edge of the green. If the first player fail twice running in complying with these conditions, the second player sets the mark. The footer is placed by the last player, but the first player may move it to any place not exceeding 1 yard distant. The object of the game is to lay the bowls alongside the jack, and he whose bowl is nearest to the jack when all the bowls are delivered, counts one. If he have two or more bowls nearer than any bowl of his adversary, he counts one for each such bowl. The balls must be bowled, not thrown, and should touch the ground opposite the player's left foot. The game is usually seven or eleven up. When the players number four, they are usually divided into two sides. Each player delivers one bowl in turn. No player may follow his bowl at less than 1 yard distance. A set of bowls costs about 30s.

LAWN-TENNIS.

For a single court of lawn-tennis a lawn 34 yards long by 13 wide is required. For a four-handed court the lawn should be 2 yards wider.



The courts are of the shape and dimensions shown in the diagrams, and the lines have the names there given.

To mark out a court. Put a peg in at A. Carry a line to *b*; stretch it tight. Measure off 26 yards, and put in a peg at B. Put in a peg at

a, anywhere on A, B, six or seven yards distant from B. Tie an end of the line round this peg, and make a loop in the line about 12 yards from the peg. Through this loop put another peg, keeping the loop close to the point of the peg, and with this point make a scratch on the turf at C. Now measure off *Bb* equal in length to *Ba*. Take the first peg from *a*, and put it in at *b*. With the point of the second peg make another scratch at *c*. Now carry a line from B through the intersection of the scratches to beyond C. Measure off 12 yards on this line, and put a peg in at C. Measure 26 yards from C and 12 from A to D, and then put in another peg. Now, to make sure that you have a rectangle, take a line 30 yards long, and with it measure the diagonals A, C, and B, D. If these diagonals are equal, the court is correct; if not, it will be necessary to shift two *adjoining* pegs, say B and C. If the diagonal B, D, is *shorter* than the diagonal A, C, then C must be shifted a few inches *toward* B, and B a few inches in the same direction, so as to keep the distance between them. When the outside lines are correct, the remaining lines are easily measured.

Asphalt courts, so called, are rarely made of real asphalt, which is very expensive. Usually they are made of sand or cinders and gas-tar. Cinders may be used for the foundation, but the surface should in every case be of sand, for a surface of tar and cinders is dirty and difficult to keep smooth. Mark out the size of the court, take off the turf and top spit, put in a good foundation of broken brick or stone rubbish or ballast; cover with 3 or 4 inches binding gravel or small cinders. Level, leaving a slight fall from middle to sides and ends. Roll thoroughly and often. Take 11 cartloads of sharp sand and mix little by little with 200 gallons gas-tar, turning over every day for three days, and adding on the last day 8 or 10 barrow-loads of lime. Now lay the tar mixture 1 inch thick over the cinders, rolling continually, and sprinkling freely with sand to keep the roller from sticking and tearing up the surface.

There are other ways of making courts with tar and sand or tar and cinders. All agree in requiring a thoroughly good foundation and abundant rolling, and differ mainly in the amount of tar used in their formation. They all have the advantage of low cost of material, unskilled labour being the chief item in the expense of making them, and are therefore very suitable for asylums.

The cost of concrete courts may be calculated from the usual cost of concrete at the place. 1s. 6d. to 2s. per superficial yard 6 inches thick is a fair cost. For a single court this would work out at £33 to £44. For a double court from £38 to £51. Of course, when the asylum provides the labour the cost will be less; but it must be remembered that the labour in making a bed of concrete is much more skilled than in making one of gas-tar.

To level a court there will be required a straight-edge from 12 to 15 feet long, a spirit-level, and a quantity of flat-topped pegs. The first peg is driven into the ground to the level that the court is to be, and care must be taken to choose this level, so as to involve the least labour in moving the soil. Other pegs are driven in at distances from the first peg less than the length of the straight-edge, and are levelled with the first peg by the straight-edge and spirit-level. At each test the level should be turned end for end before the peg is finally adjusted. From the pegs thus levelled the process is continued to other pegs at a greater distance until the whole court is levelled. The asphalt or concrete is made up to the tops of the pegs, which are from time to time tested to see that they have not shifted. Care must be taken to keep the pegs upright.

Lawn-tennis racquets cost from 4s. 6d. to a guinea or 30s. ; balls, from 5s. 6d. to 15s. per doz ; nets, from 5s. to 18s. ; posts, from 10s. to 33s. per pair.

SKITTLES.

Appliances.—For this game are required nine “pins” and a “cheese,” of wood, weighing 14 or 16 lbs. The pins are set up in a square, one corner of which is toward the player, who stands at a distance of 21 feet from the nearest pin. A flat wooden stage must be placed on the ground to set the pins on, and it is desirable that a wooden floor flush with this stage should extend at least half way towards the player, and it is better that it should run the whole 21 feet and a few feet over.

The player stands at a mark 21 feet from the pins, and throws the cheese at them, the object being to knock down the largest number of pins in the fewest throws. Five throws are allowed, and he who knocks down all the pins in the fewest throws, or who has fewest pins standing at the end of his five “goes,” is the winner. In the ordinary or “stand-fast” game, only one step beyond the mark is allowed in delivering the cheese ; in the “trotting” game, three steps are permitted.

BADMINTON.

This is a very good game for female patients and nurses, as it does not require the quickness necessary in lawn-tennis. The rules, ground, mode of play, &c., are much the same as in that game, with the following exceptions. The court is 42 feet by 20 feet outside measurement. The net is 5 feet high. Shuttlecocks are used instead of balls, and every stroke must be volleyed. If a cock touches the ground, it counts against the player in whose court it does so. The scoring is the same as that of lawn-tennis.

RACKETS.

A racket-court is an expensive luxury, but it is a very appropriate appendage to a hospital, if not to an asylum for lunatics. The cost of erecting a double-match covered court, with spectator's gallery, will not be much short of £400. A much smaller sum will of course suffice if there is a blank wall, or, better, two blank walls at right angles, which can be utilised to form part of the court, and if the court is uncovered, or covered with wire netting only. There is no regulation size for a court, which may be as small as 35 by 20 feet for a single match, or as large as 80 by 40 feet for a double match. A good size for the former is 40 by $23\frac{1}{2}$ feet. The court requires four walls, and may be open above or covered. The front wall is 30 feet high, the back wall 12 feet. The walls should be cemented smooth and painted black. The actual construction of a court is very simple. The front wall is divided in two by a horizontal line, 2 feet 2 inches from the floor—the "play line"—the space below this line being boarded. Another line, "the cut line or service line," divides the front wall horizontally 7 feet 9 inches above the floor. In the middle of the back wall is the door, which has no architrave or mouldings, but shuts flush with the wall. This is all that is strictly necessary, but usually a gallery for spectators is added over the door, but not projecting into the court. The floor of the court is divided by a transverse line—the "short line"—into two nearly equal portions, which, however, have no invariable ratio, and the after portion is again divided in half by a longitudinal line. At each end of the short line a space about 5 or 7 feet square is marked out and called the "service space or service box," and from this space the service is delivered. The service box is exactly half way up the court.

Besides the court, the only appliances are the racket and the balls.

To play the game, the first player stands with part of one foot in the service box on either side, and serves alternately right and left. The ball must hit the front wall first above the service line and must fall behind the short line, and on the side farthest from the striker of the line dividing it. If the striker is not in his proper place, or if he strike the front wall between the service line and the play line, or if the ball falls in the wrong court, it is a fault. Two consecutive faults forfeit the service.

The service is also lost if the front wall is not struck first, or if it is struck below the play line, or if he miss a stroke in the bully.

If the second player fail to return a ball above the service line, the first player scores one. The game is 15 up.

The more forward player should never neglect to guard his face with his racket when his opponent is striking.

FIVES.

This admirable game is scarcely sufficiently known and played. The drawback to it is the cost, which must always be considerable. Since, however, a smaller court will suffice than is needed for rackets, and since a back wall is not required, about £100 will cover the cost, provided that a blank wall is available for the front wall. The length of a court should be about 25 feet, and the width 14. The floor is divided at 10 feet from the front wall by a step 6 inches high.

Around the elevated portion of the court which is nearest the front wall, the walls are 14 feet high, and their height should be increased by at least a yard of wire-netting above. The side walls bounding the lower or outer portion of the court may be lower—say 11 feet. Horizontally round the walls of the inner or front portion of the court run two ledges, each 3 inches wide, with tops sloping up to the wall at an angle of 45 degrees, the wall below the ledge being flush with its edge. The lower of these ledges is 1 foot 10 inches from the ground, the upper 4 feet 6 inches. On the walls of the outer portion of the court is a single ledge 4 feet 6 inches from the ground. At the left end of the step, a buttress—the “pepper-box”—projects from the left side wall, with a gable-shaped coping of stone. It projects 2 feet 3 inches from the wall, and is of peculiar shape, as depicted below. The walls of a fives court should be covered with a smooth layer of cement.

The game is played by striking a ball with the hand, and making it rebound from the front wall above the service line, the upper of the two ledges described above.

The first player stands on the left side of the inner or raised court, called also the “on-wall,” and plays the ball so that it strikes first the front wall, then the right-hand wall, and then drops into the outer court. The second player is not bound to return the service, even if it is a legitimate one. When he gets a service that suits him, he returns it, and the return is good (1) if the ball has bounded once, and once only; (2) if the ball strikes the right-hand wall and then above the service line the front wall; or (3) if, without touching the right-hand wall, it strike the front wall above the service line and on the right of the vertical line. After this the players return the ball alternately, striking any walls in any order they please, so long as the front wall above the service line is struck each time. The object is to make the ball fall in the pepper-box, the rebound from one of its many angles being sure to embarrass the opponent.

The second player cannot score. If the first player fails to return his ball, he goes out, and the second player takes his place in the inner court and becomes first player. The first player scores one each time the second player fails to return his ball according to the previous rules.

CROQUET.

A full-sized croquet-ground should measure 40 yards by 30 yards, but the game can of course be played on smaller grounds. The usual method of setting the hoops is as follows :—Four hoops are placed at the corners of a rectangle 24 yards by 14 yards. At the middle of the shorter sides of this rectangle are placed the pegs. At the intersection of the diagonals is placed the middle hoop. Midway between the middle hoop and the pegs two other hoops are placed.

The rules of croquet are usually supplied with the box of implements, and need not be given here. A set of croquet costs from 13s. 6d. to £5, 5s.

GOLF.

This game requires an extensive area of more or less waste and uncultivated ground, and is a very appropriate one to be played by patients in asylums that are favourably situated for the purpose. The course may be of any figure that is most adapted to the ground, and is determined by a series of round holes, 4 to 6 inches in diameter and the same in depth, at distances of 100 to 500 yards. The total length of the course should not be less than a mile. The object is to place the ball in each hole successively, and he who makes a hole in the fewest strokes counts the hole, while he who counts most holes in the round wins. The appliances are small hard balls of gutta-percha, and a number of clubs of different shapes and sizes.

CRICKET.

The appliances required for the game of cricket are almost too well known to need enumerating. All that are absolutely necessary are the ball, the bat, and the stumps. To these are commonly added gloves and leg guards.

The pitch, or distance between the wickets, is 22 yards. The wickets should be 8 inches in breadth, the bails 4 inches long. The bowling crease is a chalk line on the grass, in a line with the stumps, which are in the middle of it. It is 6 feet 8 inches in length, and has a short line at right angles at each end, "the return crease," directed behind the wicket. The popping crease is marked 4 feet in front of, and parallel with, the wicket, and is considered of unlimited length.

The laws of cricket were promulgated by the Marylebone Cricket Club in 1884. These laws are very numerous and lengthy, and as they may be obtained of any dealer in games, need not be transcribed here.

FOOTBALL.

As is well known, football is played on two systems—according to the rules of the Football Association, and according to those of the Rugby Union. The latter game should not be allowed in lunatic asylums.

The ground required for playing football is in length not more than 200, nor less than 100 yards; in breadth, not more than 100, nor less than 50. For matches the boundary is marked by flags. The goals are upright posts 8 yards apart, connected by a cross-bar at 8 feet from the ground.

PREPARATION OF THE GROUNDS.

For all games that are to be habitually played on turf, the ground requires to be prepared in a special manner. Where the games are played but seldom, this preparation is not required; but when, as in asylums, the ground is in constant requisition, it needs preparation, in order that it may be as little affected by the weather, and by the wear and tear to which it is exposed, as may be.

All games for which a good turf is required need that the turf should be level. For cricket and football accurate levelling is less required, but for lawn-tennis, bowls, and croquet it is necessary. Grounds with a uniform slope are adjusted to the average level by the carting of earth off the higher on to the lower ground. Allowance must be made for the settlement of the newly made ground, and therefore the part raised must be made slightly higher than the part from which the ground is taken, and the excess of height must be in proportion to the thickness of loose earth deposited. Freshly dug loam and clay will subside when consolidated to four-fifths of their bulk when first deposited. Sand and gravel will subside only one-tenth, while chalk will subside nearly one-fourth. If, as often happens, a bank has to be made, various slopes must be given, according to the nature of the material forming the bank, otherwise the bank will slip down. Compact loam will stand at an inclination of 50° with the horizontal; clay, *if well drained*, at 45° ; gravel at 40° ; sand at not more than 25° .

While levelling the ground, or if the ground be already level, the land, unless it possesses a dry subsoil, must be drained. The size, number, and position of the drains will vary much with the character of the land. In a stiff clay, 3-inch pipes 4 to 5 yards apart will be necessary; with an open subsoil of gravel a single good drain will be enough. The tiles should be laid $3\frac{1}{2}$ to 4 feet deep, and should be covered by a thick layer of broken bricks, elinkers, ashes, &c., to within 18 inches of

the surface. They should be led completely across the ground from end to end, with a fall of $1\frac{1}{2}$ inch in every 10 feet, and should be connected at each end of the ground by transverse pipes of larger diameter, the lower to carry off the water, the upper to admit the air. The ends of the upper pipes should therefore open to the surface.

The surface may be made with turves or sown, and both plans have their advocates. If good turf is available, it makes a satisfactory ground in a shorter time than by sowing; but, on the other hand, if the ground is sown, it is free from the weeds which are inseparable from turf, and the kind of grass most suitable for the purpose can be chosen.

Whichever mode is chosen, if it is desired to form a fine turf, a layer of ballast should be laid all over the ground, unless it is already very light, and on this 6 inches of good loam. This layer of ballast should connect with the drain, and will ensure the dryness of the surface in all weathers. Slopes which face the south should, on the other hand, have at least 9 inches good loam to prevent the grass getting quickly burnt.

If turves are to be laid, the first object is to get them from a suitable spot. The grass should not be coarse, and the best turves are taken from chalk downs and land that has been pastured with sheep, which destroy the coarse grasses by the closeness with which they feed. Before the turves are cut the grass should be mown and rolled. Turves should be cut *thin*. It is a great and common mistake to suppose that the thicker the turf is, the better. The thinner they are cut, the flatter they will set to the ground, the more level the surface they will make, the more readily can they be beaten out, the more space they will cover, the sooner and thicker the new rootlets will spring from the base, and the quicker the turf will be consolidated and fit for use. Turves can scarcely be cut too thin; 1 inch is a good thickness. The ground on which the turves are to be laid should be dug over, rolled, and raked or harrowed. If dry, it should be watered just before laying the turves. As the turves are laid, the plaitain and other used roots must be picked out. The turves, when laid, should have sifted mould scattered over, especially at the joints, and should be beaten and then rolled. The roller must at first be light, but afterwards can scarcely be too heavy.

If the ground is to be made by grass from seed, it is prepared in the same way as for turf, by levelling, digging, rolling, and raking. The seed should be bought of a first-class seedsman, as only by doing so can the buyer ensure that he gets what he orders. If the area to be sown is large, it will be worth while to have an expert from one of the great seed-houses to advise as to the mixture to be sown; for, laying down a large area of grass is a very expensive matter, and if not well done in the first place, the result is never satisfactory. For most land, however, the following mixture will make a good ground of tough, hardy grass,

which will grow fast and stand wear. It should be sown thickly, not less than 50 lbs. to the acre, so that the surface may soon be covered with a thick growth of interlacing roots.

To restore turf that has become worn, it is of little avail to sow grass seeds on the bare spots. They should be pared, and new turves laid down. An implement made like a large trephine, with the crown 9 inches or a foot in diameter, is useful in cutting out patches of bad turf and cutting new turves to replace them. To avoid wearing the turf in patches the cricket-pitch and lawn-tennis courts should frequently have their position changed. All such grounds should be kept mown short, and should be frequently rolled, especially in the spring. On lawn-tennis and croquet-grounds, which are of small extent, and the smoothness of which is important, the worms should be killed by watering in February or March with lime-water. If the grass becomes thin from poverty of the soil, a dressing of superphosphate in the autumn and soot in the spring will renovate it. In the country, road-scrappings should not be used for this purpose, though in towns they are very efficacious and valuable; but in the country they are full of the seeds of weeds, and may easily ruin the turf:—

Description.	For Ordinary Soils.	For Shady Places.	For Heavy and Rich Soils.
	Lbs.	Lbs.	Lbs.
<i>Lolium perenne</i>	20	20	20
<i>Cynosurus cristatus</i>	5	5	8
<i>Festuca auriuscula</i>	3	3	4
<i>Poa nemoralis</i>	4	6	4
<i>Poa pratensis</i>	2	2	2
<i>Poa trivialis</i>	2	2	2
<i>Trifolium repens</i>	6	6	6
<i>Trifolium minus</i>	2	2	1
Total	44	46	47

OTHER OPEN-AIR AMUSEMENTS.

In addition to these games, there are many forms of amusement which are very appropriate to the class of patients in pauper asylums, and may well be provided for them on Saturday afternoons and occasions on which they assemble and meet together in the open air. In all the games hitherto enumerated a comparatively small proportion of the patients can take part, and the position of spectator is in many not a very interesting one. There are, however, a number of rustic sports that may be arranged, to which no elaborate rules are applicable, in which patients of little intelligence and activity can take part, and

which are, to persons of the class of pauper lunatics, of the most lively interest, and never fail to give great satisfaction. That they are not of a very refined character is true, but they are perfectly harmless and free from demoralising tendency, and it must be remembered that the tastes of the persons to be catered for are more adapted to such forms of recreation than to the appreciation of very refined pleasures. Many of them, when sane, would find a high enjoyment in partaking in or witnessing the antics of rustics at a fair, and if we provide them with such amusements, we may at any rate be sure that their interest will be real and unaffected. Moreover, entertainments in which they themselves or their comrades and friends are the performers are of much greater interest to them than those which are provided by the officials of the asylum and their friends. The recreations which are here alluded to are such as the following:—

Sack Races.—Nothing more is needed for this than large sacks and cord.

Egg and Spoon Races.—The competitors have to carry in their hands a tablespoon containing an egg, and to arrive at their destination with the egg unbroken. “Pot” eggs may of course be used, but they detract somewhat from the interest.

A **Chatty Race** is a race in which each competitor carries on his head a basin (chatty) of water, which he must not spill on pain of forfeiting his position in the race.

In **Three-Legged** races the competitors run in pairs, each individual of a pair having his arm round the other’s neck and one leg tied to the nearest leg of his pair.

Climbing the **Greasy Pole.**—The pole is a scaffold pole 15 feet long, 3 feet in the ground and 12 feet high. The “grease” is soft soap, which does not harm the garments of the climber.

Bob-Apple is ducking the face in buckets of water to seize with the teeth apples floating therein. A similar feat is to find with the mouth a penny hidden in a basin of flour.

Buns, apples, &c., may be dipped in treacle, and suspended by a string for competitors, whose hands are tied behind their backs, to secure with their teeth.

Obstacle Races of various character can be arranged for.

In **Backward Races** competitors have their hands tied behind them, are laid on their backs on the grass, and bidden to rise to their feet and run backwards to the winning-post.

In **Animal Races** each competitor has a different animal—a pig, goose, hen, dog, duck, guinea-pig, &c.—and has to drive his charge to the winning-post, keeping of course behind it all the way.

A pole may be stretched across a pool of water, made for the purpose,

and the competitors bidden to walk across it barefoot. The immersion on a warm summer's afternoon will do them no harm, and will be highly appreciated by the spectators.

Whatever competition is arranged, some small prize should be given—a screw of tobacco, or some such trifle—to give an interest to the affair, and to reward the successful.

IN THE RECREATION-HALL.

The recreation-hall is in many of the newer asylums a splendid apartment, capable of holding several hundreds of persons, and provided with a complete stage with elaborate accessories, and often a music-gallery in addition. The forms of recreation that are carried on in this hall are usually three, viz., dances, theatricals, and an occasional concert. There are, however, other forms of entertainment that might be given therein, and to these reference will be made further on.

DANCES.

The dances are commonly held weekly, and this is, no doubt, often enough. Every patient whose bodily and mental health are sufficiently good to allow him or her to do so should attend the dance. Usually a certain proportion only of those who attend the dances take actual part in them, the remainder sitting round the room as spectators, and having a very dull time of it. Something more than the mere spectacle of the dance should be provided for these unoccupied spectators. Cards, dominoes, draughts, chess, and other table-games should be provided for them; and the attendants, as well as patients, who are neither musicians nor dancers, should be both allowed and encouraged to pursue these forms of recreation.

The great benefit of the recreations that are pursued in the recreation-hall arises from the fact of the association of the sexes in them; and this fact should be borne in mind by the authorities, and the association encouraged. Usually the ridiculous spectacle is witnessed of the men sitting on one side of the room and the women on the other, staring at each other across the empty space, but precluded from conversation. This should be altered. There are, it is true, certain patients on each side who cannot be trusted in proximity to the other sex, but in the great majority of cases there is not the slightest objection to the male and female patients sitting side by side, conversing together, being partners or opponents at whist or cribbage, and, generally, associating together under the eyes of the numerous officials present. No influence that can be brought to bear upon rough, uncouth, and eccentric persons

is comparable in efficacy to that of occasional association with the other sex ; and whether the defect in their conduct arises from ignorance or from insanity, the benefit is equally great. It constantly happens that a man who is utterly unmanageable and unimprovable under the influence of men yields with the greatest readiness to a woman, and improves greatly under her sway ; and similarly, it is very common for a woman who is unmanageable by women to become perfectly tractable under the influence of a man.

The separation of the sexes in lunatic asylums is, in my opinion, carried too far. It must, of course, be perfectly efficient to the point of preventing any indecency or undue familiarity, but this end can be attained without enforcing the complete separation of the one from the other.

There are in every asylum a very large number of patients who could be as safely trusted to mingle with persons of the opposite sex as the ordinary householder in his own home ; and to such persons liberty should, if they desire it, be freely allowed, proper safeguards and supervision being of course understood. There is a practice occasionally, though scarcely sufficiently often, resorted to, of allowing a patient to entertain his, or more usually her, friends of the same sex from other wards at tea at a separate table. The privilege is a small one, but it is very highly valued. It would be much enhanced if it were, as it might easily be, extended to patients of the opposite sex. If there were, as in some cases there is, objection to introducing patients of the other sex into a general ward, there would be none in allowing a mixed tea-party to assemble in some neutral part of the building, such as the visiting room, even a corner of the recreation-hall, under the supervision of an attendant.

To return to the weekly dances. They are usually from eight to ten in the evening, the patients wearing their slippers and their best clothes, and any little pieces of finery of which they may be possessed. Commonly the dance does not begin until the superintendent or his representative enters the room ; and as to this, it must be here said that either the superintendent should be punctual or the rule should be abolished. It is a very right and proper regulation that some superior officer should be present to preserve order and decorum, and to deal with any exceptional circumstance, should one arise ; but it is not right that a large number of patients should be kept waiting in idleness, and their brief hours of enjoyment curtailed to suit the convenience of a single man. When, therefore, the superintendent is not able, or is not willing, to be present at the time when the dance ought to open, he should delegate some one else to be present, that the interests of the patients may not suffer.

Since these weekly dances are instituted for the amusement of the patients, the usual and proper rule is that the attendants are not to dance with each other, but with patients only. It is well, however, to make an exception to this rule in the case of a single dance, and to allow the attendants their share of the amusement by permitting them in this one instance to dance together. The rule is not usually applied to the superior officers, though there is no valid reason why it should not; and there is a practice, much more honoured in the breach than in the observance, according to which one set at the top of the room is kept sacred to the superior officers, and into this neither attendants nor patients are permitted to intrude. These absurd caste distinctions should be abolished. The superior officers should distribute themselves throughout the room, dancing in different sets, and contributing by their wide dispersion to the thorough maintenance of decorum and to the better performance of the dances. They should be careful, both by example and by demeanour, to discourage the somewhat boisterous and romping method of dancing which is apt to be practised at the lower end of the room. It is well also for them to set an example of going about the room and chatting with the patients between the dances.

THEATRICALS.

There has been some controversy as to whether theatrical entertainments are or are not advisable in lunatic asylums, and as to whether, if they are beneficial, they should be conducted by members of the staff or by companies invited from outside the asylum to perform for the benefit of the inmates. With regard to the former point, the writer, speaking not without experience, has no sort of doubt that such performances are very advisable; that they give to the patients an occasion of interest and of mild excitement beforehand, and of conversation and pleasurable retrospect afterwards, which is both valuable and valued. Neither does he share in the opinion, sometimes expressed, adverse to the performance of theatricals by members of the staff, provided always that the pieces for performance are wisely chosen, and that the theatrical entertainments are kept in a subordinate position.

It must be admitted that it is not desirable to require or to encourage the female staff of the asylum to appear on the stage in tights; nor is it proper that the possession of dramatic abilities should lead to the engagement or retention of a member of the staff who is otherwise unsuitable for the position. But that the co-operation of officials of various grades in the production of a play is disadvantageous to the discipline of the asylum the writer is in a position to deny; and the preparation of a theatrical piece is a very great relief to the inevitable tedium of long winter nights in an

isolated and remote position. There is no reason whatever why a dramatic company from outside should not also be invited to perform before the patients, and it is obvious that as the number of pieces that can be produced by the staff in one season is strictly limited, there is every reason why this practice should be resorted to. There is scarcely a provincial town nowadays without its amateur dramatic society, the members of which are usually delighted to have an opportunity of exhibiting their talents under the favourable circumstances as to stage, hall, and enthusiasm of audience which are present in large asylums.

In selecting a play, regard must, of course, be had to the amount and character of dramatic talent that is available; and advantage should be taken of this talent wherever it exists, or, in other words, the play should be "cast" according to the dramatic powers of the performers, and not according to their position on the staff of the asylum. The not unusual practice of giving the most prominent part to the official of highest rank, and of apportioning the others on the same principle, is scarcely likely to be productive of the best performance. As to the actual play to be selected, recourse should be had to the excellent and very complete "Guide to Selecting Plays" published by Mr. French of 89 Strand, from whom also the plays can be obtained. In this guide the plays are classified according to the number and sex of the performers required, and a brief description is given of each, to the number of some 1500.

Of the various classes of plays, low comedies and farces are undoubtedly the most suitable to, and popular among, asylum audiences; but the former especially are apt to be very stupid unless among the performers is a really talented low-comedian, a class of actor rarely to be found among amateurs. It will be found, as a rule, that the class of plays known as "light comedies" are the best for amateurs, as requiring least departure from the manners and demeanour of their ordinary lives.

In the matter of costume, the committees of asylums are usually liberal, and will defray the charge of hiring them from professional costumiers, who are sufficiently numerous and well known to require no mention here.

The "make up" required for the stage is nowadays always effected by "grease paints," which may be obtained of the theatrical wig-makers. A book of instructions for their use is also published by Mr. French. The face should always be powdered after the grease-paint is put on.

The chief warnings necessary to give to amateurs are: (1.) Speak loud and speak distinctly. (2.) As a rule, speak more slowly than in ordinary life. Amateur actors have a great tendency to gabble, especially when they get excited, and then become wholly unintelligible. (3.) Do not run your sentences into each other, but allow a distinct pause between

each, and keep up your voice quite to the ends of your sentences. (4.) Remember that on the stage everything has to be a little exaggerated. Just as the red of the cheeks and the lines on the face have, in order to be perceptible on the stage, to be emphasised and exaggerated beyond what is quite natural ; so laughter, crying, pauses, expressions of delight, astonishment, and so forth, peculiarities of gesture, gait, &c., must all be slightly exaggerated in order to produce, when seen at a distance, the same effect that their ordinary performance would have when seen near. One way of producing this increased effect is to do everything more slowly. (5.) Try to remember that though your part may be the most important, it is not the only one in the piece, and give your fellow-performers a fair opportunity of being seen and heard, and of bringing out and benefiting by their "points." When a colleague, for instance, has gained a round of applause, give it full time to subside before you continue the action of the play.

CONCERTS.

The preparation and performance of concerts in asylums does not differ widely enough from their preparation and performance outside to render any very detailed instructions necessary. It is obvious that the performance, in order to attract the interest of the audience, must be of appropriate character, and that what is known as "chamber music" would be out of place. Reliance must be placed chiefly upon singing, and simple glees and part-songs are always very popular.

There is in some unsophisticated minds a peculiar and unaccountable pleasure derived from hearing music sung by persons with blackened faces and in absurd costumes, and the class of mind that inclines toward this form of entertainment is, as might be expected, prevalent among the inmates of lunatic asylums. We can no more assign a reason for this strange preference than for the many other curious inclinations that our patients exhibit ; but since this one is harmless and its satisfaction gives them pleasure, we should endeavour to gratify it. In a large asylum it will usually be practicable to discover a sufficient number of men who will consent to temporarily disfigure themselves in this way for the amusement of the patients.

In addition to concerts, plays, and dances, there are other forms of recreation that can be provided for the patients in the recreation-hall. Some of these, such as conjuring and ventriloquism, require the assistance of professional performers from outside ; others can be quite well furnished by the officials of the institution itself.

Tableaux vivants will be inappropriate in public asylums, as usually over the heads of, and unintelligible to, the ordinary run of patients ; but

the form of entertainment known as "living waxworks," in which appropriately dressed performers take the place of figures in a waxwork show, are exhibited by a showman, are wound up with a policeman's rattle, and go through an imitation of the mechanical movements of a wooden figure, can easily be managed, and is usually very successful. The chief element in the success of this form of entertainment is the showman, who should be a person of considerable humour and audacity. The subjects chosen should be those which are familiar to the class of persons from whom the patients are mostly drawn, or should be individuals or groups whose character can be readily and clearly described by the showman. Nursery rhymes thus illustrated are always popular, and events in the outer world in which prominent persons are engaged may be depicted, as indeed may any story with which the spectators are familiar.

Another kind of amusement that may be followed in the recreation-hall is that of exhibition of pictures by means of the gas-lantern. Now that a photographic apparatus forms part of the armamentarium of every asylum, there should be no difficulty in providing frequent displays of this nature. The transference of a photograph on to a lantern slide, and the task of colouring it with translucent tints, is so easy, and withal so pleasant a task, that the supply of slides may easily be made abundant. The means at the disposal of the latter-day photographer are so ample, that the photographs taken during a single afternoon's excursion may be sufficient to occupy an entire evening in their display. By this means the photographer may enable some hundreds of unfortunate patients, who rarely get a glimpse of the world outside the asylum, to revisit with him vicariously the scenes of his excursions, and may render his accounts of even the most prosaic journey full of vivid interest to them.

PART IV.

DETENTION AND CARE.

CHAPTER XVI.

DETENTION.

DETENTION being one of the primary objects for which patients are placed in asylums, must always occupy an important place in the consideration of the managers of these institutions. Since the object with which a patient is sent to an asylum is that he may be *detained* under care and treatment, it is important to have a clear understanding as to what is meant by the detention which is ordered. In nearly every asylum—I think it may be said in every one without exception—detention is understood to mean that the patients are to be kept permanently within the precincts of the asylum, unless and until they leave it altogether when they are discharged on trial, saving only that some of them are allowed from time to time to take exercise beyond the asylum precincts under the charge of attendants.

This interpretation of the meaning of the term detention seems to me an unduly restricted one, and to result in a very undue amount of restriction of the liberty of the insane. Such a term in such a context ought, I think, to meet with a very wide interpretation, dependent on the nature of the case of the individual lunatic. What should be looked at is the meaning and intention of the Legislature in making the enactment, and as to this meaning and intention we have a clear indication in the words of the enactment itself. The patient is to be “detained *under care and treatment.*” That, it would seem, is to say that the amount and nature of his detention is to be such as is consistent with his “care,” and such as will most conduce towards successful “treatment.” There is nothing in the Act about “safe custody,” which is the term that would surely be used if the stringent detention usually enforced were intended by the Act. All that is enjoined upon the managers of asylums is that the patient is to be detained under care and treatment. Having regard to the other provisions of the Act, and the safeguards that are

over and over again introduced into it to prevent, first, the transmission of patients to asylums without sufficient cause being shown, and, second, their "detention" in asylums longer than is necessary, it can scarcely be doubted that all that is meant by detention is such a degree of restriction of liberty as is required to prevent the patient from endangering the safety or outraging the feelings of other people, as is required for his own safety, and as is most advantageous to the treatment of his own malady. More than this is not required, nor is it authorised by the Act, and more than this is, upon the face of it, unjustifiable.

If this view of the law is correct, then it is evident that the restrictions upon the liberty of the inmates of asylums that are ordinarily enforced are far in excess of what are authorised by law. To keep in close confinement a harmless imbecile, who is indeed unable to appreciate the value of money or to earn his own living, but who is quite capable of finding his way about and of safeguarding his own person from the dangers of the street, is to exceed the powers conferred upon asylum managers by the Act of Parliament. Or take the case of a patient who is subject to periodical outbreaks of mania which can be foreseen for days or weeks, and who is practically sane in the intervals. Can it be necessary, for either of the three objects above enumerated, to keep such a patient within the immediate supervision of the attendants during the times when he is practically sane? In my opinion it is not necessary, and not only is it unnecessary, but in so "detaining" him the authorities of the asylum are, I think, acting *ultra vires* and exceeding the terms of their commission.

It is commonly assumed that all patients who are in asylums are *ipso facto* of such habits or tendencies that practically no liberty at all is to be allowed them, and they are to be kept constantly under lock and key. This assumption is far too large. It may be a fair assumption to start with when the patient is first admitted, and needs to be kept under minute observation for a time to discover what manner of man he is; but one of the first problems which the medical officer should set himself to determine should be, how much liberty can safely and judiciously be allowed to this patient?

It must never be forgotten that a considerable number of the inmates of asylums are in that position simply because they happen to be paupers; and that had they happened to have been born with a competence secured to them, the question of placing them under care would never have arisen. There are very many members of society who are saved from becoming inmates of asylums by this fortunate circumstance, and whose liberty no one thinks of restraining further than by advice and moral suasion; and beyond the necessity of conforming to the common rules necessitated by the daily routine of the asylum, there is no reason

why their less fortunate brethren should have their liberty any more closely restricted.

Neither must it be forgotten that the law has formally recognised the principle that a man may be sufficiently insane to be deprived of the administration of his property without therefore losing any portion of the control over his personal liberty, thus distinctly allowing that a man may be insane and yet may need no restriction of liberty at all—a proposition which necessarily includes that which is here upheld, viz., that he may be insane and yet require very little restriction.

If a patient is not suicidal, is not aggressive, and is capable of taking care of himself in the streets, then in my opinion he should not be called upon to prove his fitness for being allowed to go about by himself. The onus should be upon those who have the care of him to show why this liberty should *not* be allowed him. Doubtless there may be good reasons, unimpeachable reasons, for withdrawing this privilege. The patient may be a shameless and persistent beggar, or a runaway, or may render himself so conspicuous by costume or demeanour as to bring himself into derision, or may be indecent; or, if a woman, may be in danger of coming back pregnant; and any such reasons would be good ground for rebutting the presumption; but some such reason should be required, and in the absence of any such reason a patient should have a right to his parole.

It may be said with much plausibility that tendencies may exist which would render it unsafe or improper to allow a patient his parole, and yet that these tendencies may not manifest themselves while he is in the asylum, and may only come to light by the occurrence of some regrettable incident while he is out and not under control; but the reply to this argument is obvious—it is the business of his custodians to discover such tendencies. If such an argument were allowed to have weight, it is manifest that no patient would ever be discharged; and if it is competent to a medical officer to discern when a patient is in a fit condition to have the restrictions on his liberty removed altogether, it is competent to him to decide when a patient is fit to have those restrictions relaxed.

That the introduction of the system of freedom on parole on an extended scale into lunatic asylums would involve a vast increase in the care and minuteness with which the patients would have to be studied, and would add enormously to the responsibility of those who have them in charge, is incontestable; but these reasons do not appear to militate in the least against the extension that is advocated. The first reason appears most distinctly to tell in its favour, for anything which adds to the individuality of the study and treatment of insane persons is to be cherished and adopted as far as may be; and for the second, it must not

be allowed any weight, for a man who is unwilling to incur responsibility has no business to undertake the care of insane persons.

In thus advocating the extension of the liberty of insane persons, even to the extent of allowing numbers of them to be absent from the asylum without supervision, I am not speaking ignorantly, nor without experience in the matter. In the licensed house of which I have charge, in which the patients are so few that unlimited time and attention can be given to the study of each case, I have been able to allow out on parole as high a proportion as *fifty per cent.* of the total number of inmates, and this without any untoward result whatever, except that on one or two occasions a patient has extended his ramble so far as to call upon an old acquaintance to whom he was not very welcome. The whole of the patients resident were not selected in any way, and except that they included a smaller proportion of demented, did not differ in any way in the general type or gravity of their malady from those in public asylums. The large measure of liberty that it was found possible to allow them depended solely on a careful study of their cases, on a generous confidence in their word, and in a vigilant observation of the phases of their malady, so that the times when liberty could not be wisely accorded could be foreseen, and the parole temporarily withdrawn accordingly. I am far from saying that in any public asylum it will be found desirable or possible to give freedom on parole to anything approaching to so large a proportion of the inmates, but I am very sure that there are few asylums in which a considerable number of patients could not be found who are fit to enjoy this modified degree of freedom, and who would appreciate that freedom as much as the patients to whom I have been able to accord it.

As an intermediate stage between strict restraint within locked doors and complete liberty on parole, a certain number of patients may be allowed their liberty within the precincts of the asylum, or, at any rate, within that side of the asylum devoted to their own sex. On each side of every asylum there should be at least one ward of which the doors are not locked, and from which the selected patients who are wardened therein can have free egress at pleasure to certain parts, if not to any part of the asylum grounds.

CHAPTER XVII.

CARE.

CARE of the patients falls under three heads :—Care of their safety ; care of their cleanliness ; care of their comfort.

The safety of patients may be imperilled in five different ways—

- a.* They may wilfully injure themselves.
- b.* They may be wilfully injured by other patients.
- c.* They may be injured by the means used to restrain.
- d.* They may be injured by accident.
- e.* If epileptic, they may be injured in their fits.

SUICIDE.

Suicidal patients are the chief difficulty and the chief anxiety of the officials of lunatic asylums. The anxiety attending the care of a suicidal patient is always very great, and is even greater when the tendency appears to be diminishing than when it is at its height. When it is manifest that a patient is actively and determinedly suicidal, then the mode of dealing with him is clear. He is kept under continuous supervision night and day, and as by this means he has no chance of effecting his purpose, the minds of those who have charge of him are at rest. The real difficulty and the great anxiety arises when an amendment has taken place in his condition, or when a patient comes under care whose suicidal tendency is doubtful, or slight, or of uncertain intensity. Such a patient may, of course, be rendered safe by being placed under continuous supervision ; but if the supervision be not really necessary, it has a most unfortunate influence in several ways. In the first place, it not only subjects the patient to much unnecessary annoyance, but it may actually suggest to him the very thing that it is intended to guard against, and thus be a source of danger instead of safety. In the second place, the maintenance of continuous supervision is not only extremely irksome and wearisome to attendants, but if it is made too common, if it is prescribed too frequently, it tends to lose its importance in their eyes ; and if it is kept up in cases in which it is not required, it tends to make them careless, or at any rate less punctually vigilant, in cases in which vigilance is of the utmost necessity. Then, as is well known, the manifest depression of spirits from which a patient is suffering is far from being a reliable guide to the strength of his tendency to suicide. Some

patients will pass through a period of apparently deep gloom and depression without the intention of suicide ever manifesting itself, while others who are, to all appearance, cheerful and contented, will surprise us by a determined, and too often a successful attempt, which is completely unexpected. The matter, difficult enough already, is further complicated by the habit that some patients acquire of talking and hinting at suicide without entertaining the slightest intention of reducing their threats to practice.

Suicidal Tendency in the First Degree.—In all this uncertainty there are, however, a few definite rules that may be obtained for guidance. If a patient have recently made a definite attempt at suicide, the indication for continuous supervision is clear and unmistakable. Such patients may be termed suicides in the first degree. The term recently may be taken to mean within a period of one month. Any patient who has made a definite attempt at suicide within one month of admission, or who at any time after admission, by attempts to obtain knives or other weapons, or by secreting tapes, cords, or strings about his person or in his bedding, or by trying windows at a height from the ground, or by attempts to elude the vigilance of attendants in a way that would not afford opportunity for escape, exhibits an unmistakable tendency to suicide, must be regarded as a suicide in the first degree, and must be kept under continuous special supervision.

Suicides in the Second Degree are a much more numerous class. Every patient who is distinctly despondent in his tone of mind must be looked upon as a possible suicide, and must be treated with precaution, though the precaution need not go to the length of keeping him under special supervision. The tendency to suicide is not necessarily proportionate to the depth of the despondency, but still the one not unfrequently bears a definite ratio to the other, and generally it is safe to suppose that the more deeply despondent a patient appears to be, the more likely it is that he will attempt suicide and the more vigilant the supervision required. Patients who are deeply despondent should therefore be regarded as suicides in the first degree, but all melancholy patients must be looked on with suspicion, and regarded as suicides in the second degree. In this latter class will also be included those patients who, though no longer showing any sign of despondency, have yet at some previous time made a definite attempt at suicide. Such patients can never be treated with confidence. Especially when the attempt was made impulsively and was not the result of a deliberate plan, the impulse is always, even after the lapse of many years, liable to recur; and there are few superintendents of asylums who have not at one time or other been disagreeably surprised by an attempt at suicide made by a patient who, of all others, appeared the

least likely to do so. When the first attempt is successful, there are no means of guarding against it, and such suicides must be set down as the unavoidable accidents that attend the occurrence of lunacy—accidents which no amount of care or foresight can prevent, except by the subjection of the whole body of patients to an amount of restraint and supervision which would be unjustifiable, both from its excessive cost and its ill effect upon the majority of patients, and which would be, on the whole, a greater evil than that which it would be designed to prevent. The following, all of which occurred in the same year, are examples of what is meant.

T. R., a patient admitted into Prestwich Asylum in 1886, was described in the statement on admission as not suicidal. He improved, and appeared to be so trustworthy a man that he was employed in the kitchen-garden, and was often left there alone. His manner was cheerful, he was neat in dress, and no patient seemed less likely to commit suicide. One day, five years after his admission, he was seen alive between 10 and 11 A.M. planting lettuces; but when called to dinner at 11.45, he was missing, and was discovered soon after hanging from a tree.

A patient was admitted into Lancaster Moor Asylum in 1876. He was characterised as dangerous and violent, but not suicidal. He appears to have shown no suicidal tendency during the fifteen years of his stay in the asylum; but at the end of this time he hanged himself.

T. D., another patient in Prestwich Asylum, was reported to be dangerous to others, but not suicidal. He improved so much and became so quiet and well conducted that his name was put down for discharge. Before, however, the formalities necessary for his discharge were completed, he injured himself so seriously with an axe that he died in consequence.

Suicidal Tendency in the Third Degree.—A third degree of suicidal tendency may be made, consisting of those patients who have at times under special circumstances uttered threats of suicide, threats which, however, apply only under the circumstances in which they were made, and which probably did not, even when uttered, represent a very fixed or serious determination. Such patients are those who, during an attack of excitement, will threaten to throw themselves out of the window if they are not allowed to do this or that; or those, chiefly hysterical girls, who are thrown into a lachrymose condition by some trifling disappointment and attempt to impress those around them by threats of suicide.

Treatment of the First Degree.—Suicides in the first degree require, as already stated, special supervision; and the supervision, to be of any use whatever, must be absolutely continuous. Any system of

prevention which does not depend primarily on continuous supervision is utterly futile, and may as well be dispensed with. To lock up a determined suicide alone in an isolation-room and to trust to occasional visiting to prevent him from effecting his purpose is utterly useless, and can only result in his death. Such a patient must not be allowed to be alone for a moment, night or day, not even to go to the closet or the urinal. Special means must be taken to impress upon the attendants the necessity for supervision, and the stringency with which it must be exercised. The means usually employed, and the best yet devised, is to issue with each determined suicide a slip of parchment containing the name of the patient, the fact that he is actively suicidal, the means by which he has attempted suicide, the necessity for never allowing him to be out of sight either by day or night, and of never allowing him to obtain possession of a cutting instrument or of anything in the nature of cord, string, or tape; together with a declaration to be signed by the attendant to whom charge of the patient is given, setting forth that he has read and understands the instructions given. Nothing which can increase the impressiveness of this notice should be neglected; and, therefore, it is well to print it on parchment or vellum in red ink. The following form may be taken as an example.

CAUTION.

Patient *John Thomas Smith* is known to be actively suicidal.
 He has attempted suicide by *strangling himself with his garters*.
 He is never to be allowed out of my sight while I am on duty.
 He is not to be allowed to handle a knife or cutting instrument, nor a cord, tape, or string of any kind.
 I am to accompany him to the closet, to search his bedclothes before he goes to bed, to see him go to bed, to remove and search his clothes, and to see him dress in the morning.
 I am not to leave him for any purpose without giving him in charge to another attendant, to whom I am at the same time to give this caution.
 I understand that so long as this caution is in my possession I am responsible for the safety of the said *John Thomas Smith*.

(Signed.) _____

Date _____

Room for several signatures should be left at the foot of the document. The same form should be issued to both day and night attendants, both of whom will thus become responsible for the patient at the most critical times; that is to say, when going to bed and when getting up; and by making their periods of duty overlap, it will be impossible

for any hiatus in the supervision to take place. Experience has shown that the greatest dangers of the occurrence of suicide are the times when the night and day attendants are exchanging duty, and the omission of the searching of the bedclothes and wearing garments. Patients who are suicidal in the first degree will, as a rule, require special attendants by day to care for them and them only. At night they will, of course, sleep in an observation-dormitory near to the station of the night attendant. The greatest watchfulness must be exerted, not only by the attendants, but by the medical officers also, in order to determine how long this special supervision is necessary, and when it may safely be relaxed. While it is most dangerous to the patient's safety to relax it too soon, it is, for the reasons already mentioned, most desirable to remove the restrictions that it requires as soon as they may be removed with safety. The efficiency of these stringent regulations lies entirely in the faithfulness with which they are observed, and this again depends upon the degree of stringency with which the necessity for these can be impressed upon the minds of the attendants. If they are made too common, or if they are continued beyond the time during which they are really necessary, familiarity with them soon breeds in the minds of the attendants an amount of indifference which may, in a subsequent case, be attended with disastrous consequences.

Treatment of the Second Degree.—Patients who are suicidal in the second degree do not need *special* supervision, but they must remain under a supervision that, although modified and relaxed in comparison with that which is necessary for the previous class, is still thorough and efficient. They must sleep in an observation-dormitory; they must not be allowed to work in the workshop, nor to have the handling of cutting tools; nor must they be allowed to work alone, or exempt from overlooking. In short, they cannot be treated with the confidence which is reposed in a "trusted" patient, but they may still be allowed a fair amount of liberty, and will be found capable of undertaking with safety much useful employment.

Treatment of the Third Degree.—Patients who are suicidal in the third degree should not be treated too seriously, at the same time that their threats should not be altogether disregarded. If the matter is treated too lightly, the patient is sometimes provoked into an attempt, or perhaps a make-believe attempt, that may become serious. Such patients should be put for a time—a few days is usually sufficient—into the second class, when the restrictions that they have to put up with will soon bring about a state of contrition which will allow of the restoration of the *status quo ante*.

Supervision.—Examination of the reports of the Commissioners in Lunacy for past years will show that by far the greater number of suicides

have been owing to negligent supervision, and that by more efficient supervision the great majority of them might have been prevented. It is obvious, however, that supervision should be rendered as easy as possible by the removal of all appliances and arrangements which facilitate, if even they do not actually suggest, suicide. As to the form and nature of appliances, enough has been said in the previous part of this work; but as to arrangements, something remains to be said. It is unreasonable to expect of attendants physical impossibilities, and it is almost equally unreasonable to expect them to possess powers of endurance, of vigilance, and of foresight much greater than are possessed by the average man or woman. In every way in which their task can be lightened and relieved it should be lightened and relieved. For these reasons, not only should no attendant have charge of an unduly large number of patients, but of the patients of whom he has charge no undue proportion should be suicidal in even the second degree. If a patient is suicidal in the first degree, it will usually be necessary to give him a special attendant to himself. It is obvious that if an attendant has two or more patients to look after, and one insists on going one way and another another, the attendant cannot keep both in sight. Of course, if one patient is very tractable, and will accompany the attendant as he is told, then the matter is easier; but patients who are suicidal in the first degree are not usually very tractable. The strain upon the attention and the anxiety involved in the care of suicidal patients is so great that no attendant ought to have a large proportion of suicides under his care; nor ought any attendant to be made special to a suicidal patient for more than a week together, without an interval of relaxation with patients of a less anxious class. The prevention of those suicides for which opportunity is gained by escape from the asylum is dealt with in another chapter, together with the necessity for periodically counting the patients; but certain other provisions need to be mentioned here.

PRECAUTIONS.

Razors.—Several suicides have been effected in asylums by means of the razors kept by the attendants for shaving themselves. One of these, which occurred at Bethlem, is particularly instructive. An attendant had been shaving himself in a bathroom, and, having finished, he left the bathroom razor in hand. At the door he was met by a patient, who immediately attempted to get possession of the razor. In the struggle the attendant was badly wounded, and the patient eventually succeeded in obtaining the razor, with which he immediately cut his own throat and died. It is evident that so long as attendants shave themselves anywhere but in their own rooms, so long incidents like the above will

be possible ; and although such incidents will always be very rare, there are others which are likely to be much more common, and examples of which have, as a matter of fact, occurred. An attendant who desires to shave is very likely to go into a bathroom for the purpose, for he can get there hot water which he cannot get, unless he fetch it, in his own room. If he do use the bathroom, it is likely to be only a matter of time whether he will lay his razor down and forget it, or be suddenly called away and leave it inadvertently. In either case, the means of suicide or homicide are left at the command of the patients. Even if an attendant always shaves in his own room, and this is a large assumption, there is always the chance that he will leave his razor lying about, and that his door will be left open, either from the lock being out of order or from inadvertence ; and again the patients have access to the razor. Several cases that have actually occurred could be adduced to show that this danger is not an imaginary one. The following, which happened quite recently, will suffice.

An attendant in the Essex County Asylum had slept in the room of another attendant, the door of which had a spring-lock. The attendant stated that he slammed the door, and left it, as he supposed, locked. In the bedroom was a cupboard, which was usually kept locked, but the key of which had been broken ; and although the defect had been reported, it had not yet been remedied. A patient thus, through the defect of two locks, gained access to the cupboard, in which a razor was kept, and with this razor he destroyed himself.

In view of these suicides by means of attendants' razors, it is desirable that the introduction of razors into asylums should be absolutely forbidden, and that attendants who desire to shave should attend the barber's shop for that purpose.

Knives and Scissors.—Attendants should not be allowed to carry loose knives and scissors in their pockets. If they do so, it becomes simply a question of time how soon or how late they will leave these weapons lying about for the patients to secure and convert to their own use. Even if they do not leave them about, male attendants frequently take their coats off to work or play more readily, and on such occasions nothing is easier than for a patient to pick the pockets and abstract the knives or scissors therefrom. Knives and scissors should therefore be supplied by the asylum already attached to chains, and the chains attached to the belt together with the chain that holds the keys. Thus attached, there is no danger of the knife or scissors being lost or stolen.

The knives that the patients use at dinner are to be kept locked in boxes, one attendant being made individually responsible for each box. The knives are counted out of the box before each meal, and counted back into the box when dinner is over and the knives have been cleaned.

Patients must not be allowed to clean knives, as at least one suicide has resulted from this practice.

Broken Glass and Crockery.—Broken glass and crockery is of course very dangerous material, and strict instructions should be given that when any breakage occurs, the broken fragments are at once to be removed from the ward. In the case of a broken window, the fragments remaining in the frame should be at once extracted and removed.

Home-Made Knives.—Patients display much ingenuity in manufacturing cutting instruments for themselves out of odd bits of metal that they meet with in their work or find about the grounds. Bits of barrel hoop, bits of tin and zinc, are used in this way, but the most deadly are made of broken stay busks and the steels from women's dresses, which are capable of being ground to an extremely fine edge. Handles of wood are placed on each side of the blade for half its length, and bound together with string or wire, and a most formidable weapon is thus formed. These weapons are of course made by the better class of patients, who are not under strict supervision, and are not regarded as suicidal; and, as a matter of fact, the purpose of their manufacture is usually innocent. They are made to cut up tobacco, or for carving wood, or some such purpose. But none the less they must be taken from the custody of the patients, on account of the certainty that, if suffered to remain, they will be bought, begged, or borrowed by suicidal patients for suicidal purposes. Hence the rule that every patient's pockets should be searched every night as soon as he has taken off his clothes.

After a patient has had one or two knives removed in this way, he will, however, learn wisdom by experience, and will secrete his next production in some safe place, from which he can take it for use, and to which he can return it before he goes to bed. It is evident that no such place can be available in the wards, and the receptacle is therefore usually a hole in the wall or in the ground in the airing court. Against the clandestine possession of a knife that is secreted in this way it is extremely difficult to guard; but, fortunately, the habit carries its own safeguard with it. The place chosen is one that will not readily be discovered by another patient, and to guard against loss the patient will have overcome his disposition to lend it. As a matter of experience, suicides in asylums with self-made weapons are extremely rare.

Points of Suspension.—By far the commonest means of suicide employed in asylums is, however, hanging and strangulation; hence the necessity insisted upon so strongly in another chapter for minimising opportunities for this form of self-destruction by abolishing all appliances that can be used for points of suspension. The most obvious of these, and the ones most commonly used, are the bars and holes in window-

shutters, when these are employed, the bars of windows, and gas-brackets. The construction of window-shutters which leaves no point of attachment for a cord has already been given, and insistence has been laid on the necessity of using forms of support for gas-lights which shall neither suggest nor allow of suicidal suspension. The possibility of a patient turning his bed up on end and hanging himself from one of the legs had often occurred to me ; but as far as I know this mode of suspension had never actually been put in practice until last year, when it was employed by a patient in Lancaster Moor Asylum. It is obvious that it is not possible so to construct a dwelling as entirely to avoid affording any means of suspension to a person who possesses ordinary ingenuity and plenty of time. The utmost that can be done is to afford no means that are obvious and suggestive, and to allow of no opportunity of expending time in fabricating or adapting means for the purpose. The first object is a matter of construction, and is dealt with elsewhere ; the second is a matter of supervision.

Means of Suspension.—Not only points of suspension, but means of suspension must be as far as possible minimised ; and of the latter, as of the former, it must be admitted that all that can be done is to minimise them, so that time and ingenuity are needed for their use, and that they cannot be altogether abolished. Braces, handkerchiefs, garters, and bootlaces may indeed be done away with ; but some textile fabric a patient must have for clothing, and so long as he has a textile fabric within reach and unlimited time to bestow upon it, so long it is impossible to prevent him from tearing strips off it or from unravelling the threads of which it is composed, and twisting them into a cord wherewith to strangle himself. Here, again, all that we can do is to render a certain lapse of time necessary for the preparation of the material, and to take care that the patient is not left unwatched for a sufficient length of time to enable him to prepare it. This is, of course, only another way of saying that the only trustworthy safeguard against suicide is continuous supervision.

Fire.—Suicide by means of fire is not common, but several cases are on record of the use of this means of suicide in lunatic asylums. Fortunately, it is a means that is easily guarded against. That gas-lights should be inaccessible to patients should be an invariable rule ; and it is a rule that is not difficult to carry out. Fires should, at any rate in suicidal and epileptic wards, be guarded against access by the patients by means of wire-guards. The only source of fire then remaining is matches. In view of the terrible consequences that must almost of necessity follow on the occurrence of a fire in a building occupied by a large number of insane and demented patients, the most stringent rules should be made and observed with respect to the use of matches.

Attendants should be allowed to use those matches only which are supplied to them by the asylum itself, and these should, of course, be safety-matches. One box at a time only should be allowed to each attendant, and the empty box should be delivered up before a full one is issued. Only in this way can certain precautions be taken against the acquisition of boxes by the patients. The so-called safety-matches, which are said to ignite only on the box, and which very often will not ignite even there, may be struck upon glass, and therefore as much care must be taken against the possession of them by the patients as if they were not of the safety variety. Attendants must be warned against allowing patients the use of matches, and must be instructed, when a patient wants a light to his pipe, to strike the match, and to see it extinguished after use.

Water.—The only source of water that could be used for suicidal purposes, to which patients in asylums have access, is that in the baths, and the obvious means of prevention is to allow no patient to be present when there is water in a bath without an attendant being present also. Hence it follows that: (1) Patients must never be allowed the bath-key; (2) an attendant must be present during the whole time that patients are being bathed; and (3) must not leave the bath-room until the bath is empty. There is a further very necessary precaution, and that is, that when the bath is not in use, the waste must always be left open. If it be closed, and if one of the valves happen to leak, though never so little, the bath will gradually fill, and an unexpected means of suicide be afforded to the patients.

Suicide by poisoning is, in lunatic asylums, extremely rare, for obvious reasons; and when it does occur, is owing either to the drinking of a liniment or disinfectant which has been left by gross carelessness accessible to patients, or by eating the leaves or fruit of some poisonous plant in the grounds. The means of prevention are in both cases obvious.

CHAPTER XVIII.

VIOLENCE.

Provocations and Inducements—Aggressive Restraint.—Patients are not infrequently injured by the violence, intentional or unintentional, of other patients and of attendants. The proportion of violent patients among the inmates of asylums is, of course, very much smaller than is commonly supposed by the laity, and the injuries inflicted

by violent patients in ordinary asylums, tenanted by an ordinary class of insane persons, and managed by an adequate staff, are rare. Something, of course, depends on the character of the patients, and much more upon the adequacy of the staff and on the system of management; but upon the whole, injuries due to the violence of the patients are not common in well-conducted asylums; and with proper management they ought to be very few indeed. If we remember that when people become insane they do not altogether relinquish their community with human nature, but remain in large degree actuated by the same motives and subject to the same influences as sane people, we shall readily appreciate some of the reasons why injuries from violent patients are common in some asylums and rare in others. The motive to injurious violence, among the insane as among the sane, is most commonly some interference, real or imaginary, with the freedom of action of the person who becomes violent. Since, in lunatic asylums, an unusual amount of interference with the freedom of action of the inmates is a necessary condition of their malady and their position, it follows that this motive is, in asylum inmates, of necessity unusually strong, and needs, as far as possible, to be minimised, by reducing the appearance, while maintaining the reality, of the restraints. If a person not only has his personal liberty restrained, but is continually reminded of his restraint, either by the conspicuousness of the appliances, the bolts and bars, the high walls, the unclimbable fences, the heavy doors and narrow windows, or by the overbearing and domineering tone and manner of those who have him in custody, he will be very far more inclined to resent the fact of his restraint, and to endeavour to get rid of it, than if the hand of iron is hidden in a velvet glove, the appliances and means of restraint as far as possible withdrawn from observation, and the manner of his custodians conciliatory and sympathetic. If there were no other reason—there are many—but if this were the only one, it would be a sufficient justification for the ingenuity that has been expended and the expense that has been incurred in assimilating as far as possible the appearance and the working of lunatic asylums to those of ordinary dwellings. The endeavour should be, not to remind the lunatic that he is an exceptional being, but to make him forget it; not to put prominently before him the restraints upon his liberty, but to contrive so that he shall be as little sensible of them as may be.

It has been said that lunatics continue when insane to be actuated by much the same motives, distorted and exaggerated it may be, but still fundamentally the same, or, more strictly, variations of the same motives, as actuated them in health. Among persons who are not insane, one of the most powerful motives that can be brought to bear is the judicious display of confidence, and the same holds frequently true among the

insane. I have had a patient who, when kept locked up, had been a persistent runaway, and gave constant anxiety by his incessant endeavours to escape. When he came under my care, I placed him on his parole, and allowed him to go for long walks alone and unattended, making only the condition that he was to return at meal-times. For *two years* he adhered faithfully to this condition, and not until the end of that time, when, it may be supposed, his parole had been forgotten, did he fail to return at the times agreed upon.

The more that restraint on the freedom of the insane is relaxed, and the more completely the means of restraint are kept from his observation, the less complaint will there be of his aggressiveness and violence.

Closeness of Aggregation.—It is not only by the appliances and by the authorities of asylums that the freedom of action of their inmates is interfered with. The patients are constant checks upon the freedom of each other. One cannot get near the fire because of the crowd of people around it; another is deprived of his favourite seat because it has been secured by some one else; a third cannot walk up and down as he desires to do for the multitude of persons who get in his way. It is evident that restraints of this nature vary in a direct and increasing ratio with the closeness with which the patients are aggregated together. Where there is plenty of room; where a patient has choice of several seats in several positions; where there need be no struggle to get to the fire; where he can move about freely without jostling other patients; his freedom of action is far less restricted than in wards so crowded that he can do none of these things without inconveniencing some one or depriving some other patient of a share of what he has a legitimate right to enjoy. It is manifest that in the latter case the provocations to violence by interference with a patient's freedom of action will be far greater and more numerous than in the former, and hence we shall not be surprised to find, as is indisputably the case, that the aggressiveness of insane patients is directly proportional to the closeness with which they are aggregated together, and that the less the superficial area or floor space per patient, the more frequent the quarrels and the more numerous the injuries inflicted. The minimum of floor space per patient that is considered sufficient by the Commissioners of Lunacy is 40 square feet, and when it is remembered that this gives to each patient for his individual domain an area of 5 feet by 8, it cannot be considered excessive; yet there are probably few asylums in this country in which this modest standard is reached, and in very many wards that I know of it is simply impossible for a patient on a rainy day to get a little exercise by walking about the ward, without making himself a nuisance to his companions.

Insane Peculiarities.—The main causes of aggressiveness that are not included in the foregoing are those arising directly from the insanity

of the patients. Epileptics are notoriously aggressive as a class, and their aggressiveness has usually a close relation in point of time with their fits. Some become more aggressive and violent as the time for the fit is approaching, and become tranquil and amenable after the fit, or the batch of fits, is over. It is as if the nervous condition which gave rise to the fits was one of gradually increasing tension which was relieved by the explosion of the fit itself. Others become aggressive when the fit is over, as if the occurrence of the fit paralysed and put out of action the higher and controlling regions of cerebral action and left the lower to act without control.

Occasionally a patient becomes violent in consequence of a delusion or an hallucination. He hears, for instance, an imaginary voice objugating him and calling him foul names, and attributes the voice to a bystander, whom he assaults in consequence, and, from his point of view, justifiably; or he suffers from a delusion that he is persecuted by certain individuals, and assaults them in consequence.

Some patients, again, have singularly irritating and provoking habits, and, though they may not be themselves violent, are the cause of violence in other patients. Untrained and ill-dispositioned attendants are sometimes directly provocative of violence by their ill-timed or unnecessary interference and attempts at coercion.

People who are much together naturally tend to squabble. Patients in asylums, who are always together, will inevitably quarrel more or less if they have any minds at all, and from quarrelling to violence is but a short step, especially with persons naturally deficient in self-control.

Lastly, but very rarely, a patient is found who is violent simply, as it appears, from malignity and from love of inflicting pain or of experiencing the sense of power that successful violence gives.

Whatever the cause of the aggressiveness, the means of abating it is much the same, and appears from what has been said. The first essential is to minimise, as far as possible, both the restraint itself and the appearance of it; and the second essential is to scatter the patients, and especially the aggressive patients, as widely apart as may be.

Treatment of Violent Patients.—When a patient becomes aggressive, he should not have his tendency increased and aggravated by having the restraints upon him drawn still tighter, by, for instance, being secluded in a single room. On the contrary, the opposite course should be pursued, and he should be turned out of doors into a large area to wander about by himself until he calms down and his aggressiveness departs from him.

Dispersion.—All that has been said is argument for the provision of abundant space in the surroundings of the insane. The question of space is of course a question of cost, and the area that is provided per

patient in asylums can seldom on this account be as extended as is desirable ; but in hospitals this consideration does not enter so largely, and in asylums more might be done than is done to diminish crowding and allow greater freedom of action to each patient. Something has already been said on this head in the chapter on Detention, but here it should be remarked that while the provision of space indoors is expensive, the provision of outdoor space is much less open to this objection, and that the area of airing courts should be abundantly large. Moreover, the airing courts should not be looked on, as they too often are, as the only places for the exercise of the great majority of patients. In the grounds of every asylum outside the airing courts and throughout the farm, wide roomy paths should be constructed on which parties of patients could take daily exercise ; and the extension of the daily walk to these outer grounds should not be a matter of exception and of rare occasion, but of rule and of routine. In every asylum there is a considerable number of patients who can be trusted outside the airing courts without supervision, and who should be so trusted, proper precautions being of course taken to prevent the commingling of the sexes. If it be said that those patients who are fit to be trusted to go outside the courts without supervision, or with modified supervision, are, as a rule, the best workers, and cannot be spared from their duties, the answer is obvious :—Give them this liberty at those times and on those days—Saturday and Sunday—when their labour is not required.

Removal of Causes.—The means of removing the other causes of aggressiveness will appear from a consideration of those causes. During periods of excitement, patients should be kept hard at work at some laborious employment, by which the superabundance of their energies may be harmlessly expended. Attendants should be trained in the proper method of addressing and managing patients. Patients who have delusions of persecution or hallucinations of hearing abusive voices, should be placed in wards in which patients are few and attendants numerous. Patients of provoking and exasperating habits should have these habits checked and counteracted, or, if this is impossible, be isolated as far as practicable.

Change of Surroundings.—Every heed should be paid to the question of shifting the patients from time to time into different wards. It will sometimes happen that a patient will form an attachment to a ward or to an attendant, or rarely to another patient, and such attachments should not be interfered with, but rather encouraged ; but for aggressive patients a change of surroundings has often a very salutary effect. It must never be forgotten that insane persons, in common with sane persons, have their individual likes and dislikes, and to persist in

keeping in contact two persons who have conceived a pronounced repugnance to each other is simply to invite aggressiveness.

Forewarnings of Violence.—Insane persons resemble sane persons in being to a great extent creatures of habit, and the manner in which they have once attempted acting is usually the manner that they will employ when they attempt it again. This tendency has already been noticed in the case of suicides, and it is equally true of outbreaks of violence. That weapon which a patient has once used, he will tend to use again. That person whom he has once assaulted, he will try to assault again. That time of day, that occasion, that phase of his malady, that state of the wards, in which he has previously been violent, will be likely, when it recurs, to see him violent again. It is evident that this peculiarity affords to those who have care of the insane most useful forewarnings of the occasions on which violence is likely to occur, and additional warnings are often given in other ways. An outbreak of violence is often, it may even be said usually, foreshadowed by some observable incident or alteration in the demeanour of the patient, which should at once set those who have charge of him upon their guard. Thus, in one case, an outbreak of violence is portended by refusal of food; in another by refusal to dress; in another by unusual talkativeness; in another by flushing of the face; in another by pallor; in another by an unusual prominence of the expression of delusions; in another by a tendency to sing; in another by a wakeful night; in another by a series of fits; and so on. When a patient has been long in an asylum, these signs of impending violence come to be known and recognised, and the violence can be guarded against, and often prevented.

The usual course which is pursued when an outbreak of violence is seen to be impending is to give the patient a brisk purge; and it is certainly surprising how often and how much the outbreaks appear to be mitigated, or even prevented, by this means.

Mode of Assault.—Not only is the outbreak of violence usually foreshadowed by the same warning, but when it occurs it is usually manifested in the same way. One patient will always strike unexpectedly; another will precede his violence by a torrent of abuse; a third will attack only strangers, and a fourth will be careful to choose those who are unlikely to retaliate. One patient always strikes with the fist; another with the open hand; another with some weapon.

Assaults with Weapons.—Assaults made with the unaided hands are not, as a rule, dangerous. They become so only when the patient attacked is feeble or aged, or when, as sometimes happens, his bones are abnormally brittle. In either of these cases serious injury may ensue from a trifling assault with the unaided hand, and therefore

patients who are aged or feeble, and general paralytics, should not be warded with others who are likely to be aggressive. As a rule, however, assaults are dangerous only when a weapon is used, and in asylums the weapon is always of the nature of a club. I know of no instance in which a patient in an asylum has used a cutting weapon for the purpose of assault, and in the only instance known to me in which a weapon capable of inflicting a punctured wound was used, it was a stick with a nail projecting transversely from near the end, and was used in the same way as a club. Articles that can be used for the purpose of a club should therefore be kept out of the way of violent patients—that is to say, they should not be allowed in the wards. Many such articles must of course be used as implements in the various employments in which patients are occupied, and the risk of their use as weapons must be incurred. But this is one of those risks that cannot be avoided, and can only be minimised by a careful exclusion from such employments of those patients who are likely to use these implements as weapons. With all the care that can be taken, serious and even fatal injuries are sometimes inflicted in this way, usually by patients who are not suspected of any tendency to violence. But considering the very large number of patients who habitually use or have access to such implements as hammers, spades, hoes, rakes, shovels, tongs, and all the paraphernalia of the farm, the carpenter's and the blacksmith's shops, the casualties that occur in this manner are very few indeed, and speak highly for the care and discretion that are used in distributing the patients in asylums among the various employments of the institution.

Precautions as to Weapons.—In the wards, where no such selection can be exercised, such implements should as far as possible be abolished, and those that must be retained should be kept under lock and key. The most formidable weapon in domestic use is the poker, and since its use is wholly unnecessary, it should not be permitted in asylum wards. All the arrangement of the fire that is necessary, and that is usually but little, can be done with the shovel, which is the only really essential implement required in connection with the fire, and which can be kept out of reach of the patients by being always locked up in the coal-box. Brooms and brushes, which also lend themselves readily to the purpose of assault, should be kept in a cupboard with a spring lock, should be given out for use, and replaced under lock and key as soon as done with. It should be unnecessary to insist on the importance of having the rollers of roller-towels made to lock into their places, and of seeing that the locks are kept in a state of efficiency.

When all access to implements that can be used as weapons is denied to patients, they may yet construct weapons of their own of a most formidable character, and with such weapons terrible injuries have been

inflicted. The means employed is to tie a large stone in a pocket-handkerchief, or to drop it into the toe of a stocking. To guard against such a use of loose stones, it has been suggested that every path in asylum grounds should be asphalted ; but in the great majority of asylums there is no real necessity for the employment of so expensive and unsightly an experiment. At Broadmoor and other criminal asylums, where the patients are of an exceptionally dangerous class, such a precaution is no doubt advisable, but ordinary asylums are on a different footing, and in them it can scarcely ever be required on this ground, though this might be a subsidiary reason for asphaltting the walks in places in which for other reasons it appeared desirable. At the utmost it would be enough in most asylums to treat thus the paths of that court to which patients of the most dangerous class had habitual access. The safeguard against weapons of this kind is to be found in the circumstance that patients who have sufficient foresight and ingenuity to construct such a weapon will usually wait for a favourable opportunity for using it, and as such an opportunity is not likely to present itself immediately, a greater or less interval must elapse between the construction of the weapon and the occasion of its employment, and during this interval, if the routine search of the patient's clothing at night is properly conducted, the weapon will be discovered and removed, and the patient will be marked as one on whom a strict watch must be kept.

Management of Patients when Violent.—The question of the management of a patient during an actual outbreak of violence is one to which scarcely sufficient attention has been given, and in no asylum that I know of are instructions given to the attendants as to the proper course to pursue under these circumstances beyond the rudimentary caution that they are not to attempt the management of such a patient single-handed. Yet very much depends upon the way in which a violent patient is handled—much with respect to his safety at the moment, and much with respect to his conduct thereafter.

The safety of the patient is frequently imperilled by the means used to control him in an outburst of violence, and many are the ribs that have been fractured and the deaths that have occurred owing to the want of recognition of this fact, and the want of proper knowledge on the part of attendants of the way in which such emergencies should be dealt with. The injunctions that an attendant is never to deal single-handed with a violent patient, and always to go immediately to the help of a person who is attacked, are excellent as far as they go ; but it scarcely admits of a doubt that it would be of additional value to an attendant to know precisely what he ought to do when he reaches the violent patient, and this is a point to which his instructions usually do not extend.

The objects in dealing with a violent patient are evidently, in the first

place, to prevent him from harming others; and, in the second place, to avoid inflicting injury upon himself. A violent patient offers violence either (1) with a weapon, or (2) with his hands, or (3) with his feet. Patients do not often bite unless they are being held, nor do they often butt with the head, so that practically the three modes given above are the only modes that have to be dealt with at the onset. First, as to the attendant who is attacked. If the attack is with a weapon (which will, as already stated, almost always be of the nature of a club), he endeavours to seize the wrist of the hand that holds it. Once he has hold of this wrist it is evident that the weapon is useless. If the weapon is a long one, such as a broom, he must run in and get close to the patient, whose weapon will, of course, then be of no utility to him. The disadvantage of being in front of the patient is that, even though his hands be secure, he has always the power to kick, and for this reason every possible endeavour must be made to get behind him. If the patient begins with a kick while the attendant's hands are disengaged, the defence is easy. It consists in catching and lifting the kicking foot. The patient then goes down on his back and is powerless. If the patient closes with the attendant and no assistance is at hand, then, and only then, the attendant must apply the "back-heel" and give the patient a fall, taking care, however, that he himself does not fall on the patient, for in this way most serious injuries have been inflicted. To apply the back-heel, the attendant, *standing square before the patient* and somewhat to one side—say the right—strikes him a smart blow with the open hand on the shoulder—in this instance the right—with his own right hand, in such a way as to push him backwards, and at the same time closes the hand and grips the shoulder firmly. At the same moment that the blow is delivered he strikes the patient on the tendo-achillis just behind the ankle with his own right heel, bringing his foot sharply backwards, and striking the patient, not with the heel of his boot, but with the round part of the boot in which his own heel is. If this little manœuvre is properly performed, the patient must go down on his back; and not only must he go down, but he can, by means of the right hand on the shoulder, be lowered gently and safely to the ground. The attendant then sits across his legs above the knees, and has him secure. This is the best means of rendering powerless a patient who attacks an isolated attendant; but with proper management and study of cases such attacks should be very rare, and at best it is an expedient to be resorted to only upon the pressure of absolute necessity. Every precaution already given should be assiduously taken to prevent the occurrence of such struggles, for no patient from whom violence is to be expected should be allowed to be in a ward in which two attendants at least are not constantly present. So long as a single attendant is struggling with a single patient, so long will

there be a possibility, and more than a possibility—a likelihood—of one or other receiving serious injuries.

The duty of an attendant who is not himself assaulted, but who witnesses an outbreak of violence on the part of a patient, is comparatively simple. The attendant is to go at once to the aid of the person assaulted, and approaching the assailant from behind, is to secure his right wrist, by the cuff of the sleeve if possible—if not, by the wrist itself. With both his own hands he brings this hand of the patient round to the patient's back, and there secures it by grasping the clothes simultaneously with the hand. The other hand being secured in like fashion, the patient is pushed along from behind to a settee. Here he is seated with an attendant on each side, each of whom holds the nearest wrist of the patient down to the seat, or better, to the arm of the settee or chair, at the same time throwing his leg round in front of the adjoining leg of the patient.

It will not usually be necessary to maintain this restraint for long. The greatest mistake that attendants make in their control of violent patients is in holding them too long after the outbreak of violence has passed away. A very few minutes are usually sufficient.

Pretended Violence.—It requires a little discernment to decide whether a patient is really a dangerous maniac or whether he is not, for reasons of his own, assuming an appearance of violence which is not in his real character. If the attendants happen to be of not very strong character, a patient may see quite clearly an opportunity of terrorising them and obtaining by this means, upon the consideration that he must be humoured and must not be irritated, various privileges which he could not otherwise procure. When I was at the City of London Asylum there was a patient, T. M., a man of immense physical strength, who had been a charge attendant in another asylum, and was therefore fully acquainted with all the ins and outs of asylum life. This man was subject to periodical outbreaks of extreme violence, which rendered him a terror to the ward in which he was placed. After witnessing one of these outbreaks, in which he swayed a small crowd of attendants hither and thither as he pleased, and was with great difficulty overpowered, but in which, as I noticed, he exerted his great strength only in pushing and wrestling, but never in striking, I came to the conclusion that the whole thing was assumed, and that he merely pretended for his own purposes to be violent, without any real intention of injuring his custodians. I was confirmed in this view by the curious fact that these outbreaks scarcely ever occurred when the charge attendant was present, and I could not help connecting his absence in some way with the paroxysms of this patient. On the morning after the struggle that I witnessed, the head attendant came to my room to warn me that T. M.

had sworn to kill me when I entered his room, and begged that I would take a few extra attendants with me when I did so. Instead of doing so, I directed the head and other attendants to wait in an adjoining gallery at some little distance, while I went into T. M.'s room alone. The man made no attempt to assault me—on the contrary, he looked very sheepish; and from that day we had no more outbreaks of violence on the part of T. M., and no more infractions by him of the discipline of the wards. He felt that he had been found out, and we had no more trouble with him of that kind.

CHAPTER XIX.

ACCIDENT.

IN addition to the effects of their own and others' violence, patients in asylums have to be safeguarded from accidental injury, to which many of them are especially liable, owing to that deficiency of intellect for which they are placed under care. In nearly every asylum, too, there are collected together a large number of persons who are, from age or other infirmity, in a state of great bodily feebleness, and who need constant care to preserve them from accidental injury.

Causes of Accidents.—The usual causes of accidental injury to patients in asylums are falls, suffocation, and scalding, each of which must be dealt with separately, and then there is the great and terrible danger of fire, against which the most stringent and elaborate precautions have to be taken.

Falls—Epileptic Fits.—The commonest cause of falls in lunatic asylums is of course epilepsy, and many are the appliances that have been devised to safeguard the unfortunate epileptic patients from the falls which are the result of their malady. Every case of epilepsy requires special study, for scarcely any two are alike in the mode of onset of the fits, and by a careful study of the mode of attack much may be done to save the patient from injury in the resulting fall.

Warnings of Fits.—The first thing to ascertain with respect to a case of epilepsy is whether there is any warning of the onset of the fit, what is the nature of the warning, and by how long it precedes the fit.

For the practical purpose of asylum management, warnings of epileptic fits are of two kinds: those which are evident to the patient only, and those which are evident to bystanders; and again, for the same purpose,

the value of a warning depends entirely on the length of the period which intervenes between it and the convulsion.

Warnings which are evident to the patient only consist of "strange feelings," of numbness, of headache, of sensations of the most various and often of indescribable kinds. Warnings consist not only of *auræ*, properly so called, but often of vague feelings of dread and discomfort, existing hours, and even days, before the fits come on. Such warnings are evidently of the greatest value in enabling us to take precautions against the injury of the patient in the fit when it does come.

Warnings which are evident to bystanders may co-exist with internal warnings, or may be noticeable by others without the patient himself anticipating what is going to occur. They consist in alterations of demeanour, such as unusual taciturnity or loquaciousness, excitability, quarrelsomeness, querulousness, depression, stupidity, or turbulence; or in alterations of appearance, as flushing or pallor of the face, staring of the hair, vacancy of expression, and so forth. Some patients give warning of the onset of their fits by singing; others by stealing; others by losing things; one that I knew of by biting her hand; another by attacks of sneezing. It would be difficult to enumerate all the many ways in which warnings are given, nor would it be fruitful to do so, for any attendant of ordinary intelligence with a few months' experience will be able to foretell the occurrence of fits in a large proportion of his epileptic patients.

Amplitude of Warning.—The length of the interval before the fit at which the warning is given is, as has been said, most important. Where the warning extends, as it sometimes does, to hours, or even days, before the fits, it is easy to take precautions. In cases in which the warning is brief, a few movements only, it is still often long enough to enable the patient to be laid gently on the floor, and to save him from the consequences of a fall. Where the warning is too brief for this, is only momentary, every effort should be made to extend it to a length that is serviceable. The patient should be encouraged to cry out at the very first scintilla of warning. The attendant should practise and train his power of observation until he can notice the most trifling departure from what is usual in the demeanour and appearance of his patients, and observe whether these trifling alterations are as a rule precedent of fits or no. In this way much can be done by an intelligent and painstaking attendant to increase the proportion of epileptics who give warning of their fits, and consequently to add to the measure of their safety.

Direction of Fall.—Another most important circumstance to ascertain in every case of epilepsy is the way in which the patient falls. I

have never known an epileptic to fall backward in a fit.¹ They may, however, fall forward or sideways, and in either case the severity of the fall, while, together with the direction, it is usually the same in the same patient, varies very much indeed in different cases. Some patients merely slide slowly off their chairs on to the ground, and rarely or never sustain any injury. Others pitch headlong down with great violence, and bruise or cut themselves in nearly every fit that they experience. Unhappily we have no means of altering the form of the fit or of so modifying it as to make it less dangerous, or of causing the patient to fall sideways or slowly instead of headlong and with violence. Nevertheless, in this as in other things forewarned is forearmed, and if we cannot prevent or modify the fits, we can at least, in cases in which the character of the fit is dangerous, take precautions to minimise as far as possible the danger that attends them.

Labour of Epileptics.—Epileptics as a class are very good workers; they are, as a rule, robust and active, and a large proportion of the work of asylums is done by them; and, from their capability and willingness to work, it sometimes happens that they are employed in work of a character which is not appropriate for them. The liability of epileptics to sudden falls renders it necessary to prohibit them from working in any places or at any kind of work in which the danger of injury from a fall is great. They must, therefore, not work on a height, on a bank or scaffold, on a wall, a pair of steps or ladder, nor must they be suffered even to stand on a chair or a table. Neither must they work in proximity to a naked fire, as in the smith's shop, nor to boiling water, as in the laundry.

Various Precautions for Epileptics.—Wards in which epileptics live should have no projecting angles or sharp corners, in the way of window-sills or mantelpieces, at such a height that the patients could injure themselves by falling on them.

All fires in epileptic wards should of course be enclosed by guards, and the guards should be made, not of stout bars or rods, but of wire with intervals of about half an inch. Such guards have a certain resilience or elasticity, and a fall upon one of them is by no means such a serious affair as on one of stouter make.

Those patients who pitch on to their heads in their fits should wear protective hats with padded rims. These should be made of straw, and should be as light as possible. The leather caps formerly used for this purpose are pretty generally discarded, as too heavy and hot. The hats

¹ And I believe they never do so unless there is some contributory cause to give this exceptional direction to the fall. In the 44th Report of the Commissioners in Lunacy there is, however, recorded a death of a patient in the Joint-Counties Asylum from a fall "on the back of the head" while descending a staircase.

should be fastened on by a band under the chin, or they are likely to fly off during the fall, just when they are needed, leaving the patient the continual discomfort without the protection.

Patients who are liable to very serious falls should be accommodated with very low chairs, a fall from which is not a very serious matter. Those who habitually fall to one side should have their chairs made with substantial padded arms.

Special bedsteads with very short legs are commonly provided for epileptic patients, so that, should they throw themselves out of bed, they cannot fall far and are unlikely to hurt themselves. Those who habitually fall out of bed in fits should have a mattress placed on the floor beside the bed. They then can scarcely come to harm. The old plan was to place such a patient in a crib bed with high sides, so that he could not fall out, but it was found by experience that a patient is less likely to sustain injury if allowed to fall upon a soft and padded surface than if he banged himself against the sides of such a bed. Moreover, the danger of suffocation in these beds is decidedly increased, and the facilities for observation are diminished, and it is not an infrequent occurrence for a patient, either during the fit or in the dazed and stupid condition that follows the fit, to climb over the side and fall on to the floor from this additional height. On every account, therefore, the low beds without sides and with a mattress on the floor are to be recommended.

Falls from Defective Footgear.—Next to epileptic fits, the commonest causes of falls of patients in lunatic asylums are defects in their footgear, and the commonest of these defects is the fall of the stockings about the feet. Demented patients have not the sense to keep their stockings gartered, and, unless constant care is exercised, the stockings will fall and wrinkle over the boots and trail more or less upon the ground. Whenever this occurs, the patient is almost sure sooner or later to step on the loose portion of the stocking, thus fixing that foot to the ground; and, when the next step is attempted, a fall is the result. Seeing how difficult it is to get demented to keep up their stockings, a mode of sustaining them that is less uncertain than the ordinary garter seems desirable. If the combination garment recommended in Chap. XIII. were adopted, as on other grounds it should be, nothing would be easier than to attach a button to the leg portion of it, and to loop over this button a loop of tape attached to the stocking. By this means not only would greater security be attained in the suspension of the stocking, but the garter itself could be done away with, a most desirable consummation, for to suicidal women garters form a standing temptation.

Besides fallen stockings, other defects of footgear may be the causes of falls. If the boot is made too long, the wearer is extremely apt to be tripped up by the redundant portion. If it be too large, his foot may

turn in it, and so trip him up. When a boot is a good deal worn, it sometimes happens that the front half of the sole separates altogether from the welt and hangs down or gapes away from it when the foot is lifted. No more certain method of throwing a person down could be devised. It must be remembered that the wearers of the boots are not people who can be trusted to discover and complain when anything is wrong with their footgear. Dements have not sense enough for this, and require that this function should be performed for them. Hence the necessity of a periodical examination of the boots, which should be undertaken once a week, and all that are defective sent to be mended.

Falls from Feebleness.—The next commonest cause of falls, and one which is frequently the source of serious injuries, is the attempt of a feeble patient to rise from bed in the night, either for natural relief or from mere restlessness. Dements and general paralytics, in the later stages of their malady, are apt to be very restless at night, and to be continually getting in and out of bed; and in these movements they are very apt to fall, and especially to fall against the side or foot of the bed, and thus to fracture their ribs or to meet with other injuries. For these cases Messrs. Billington make a bedstead with elastic sides of woven wire, so that even if a patient fell upon them, he would not be hurt. Such a bed would not, however, prevent him from falling on the floor, and the greatest security that appliances alone can give is no doubt obtained by placing the patient in a padded room with a low bedstead, say nine inches from the floor. It is, however, a question, and a question into which the element of expense enters largely, whether patients who exhibit this habit, and are so feeble as to render a fall in getting out of bed probable, and attended by risk of injury, should be locked up in a room, even in a padded room, and left to their own devices. Under an ideal system, and under conditions in which expense is not an object, such patients should surely have an attendant at hand to restrain their dangerous tendencies, to prevent them from getting out of bed when there is no necessity to do so, and to assist them in doing so when there is real need.

Falls from Jostling.—Another common cause of falls, especially where the attendants are inexperienced and untrained, is the crowding of patients through doorways, especially if there happen to be at the doorway some obstacle, such as a step or a scraper. Persons in a crowd rarely have any consideration for each other. We see at every railway station on a Bank holiday how regardless are even sane persons of the rationale, to say nothing of the ethics, of passing through a doorway. Every individual struggles and pushes towards the opening, not merely indifferent to the comfort of the rest, but ignorant of the fact that by proceeding more slowly and orderly, and by refraining from causing a

jam at the doorway, all would get through sooner. If such is the conduct of a crowd of ordinarily intelligent sane persons, we may imagine that the conduct of a crowd of insane persons, who are on the whole at a much lower level of intelligence than an ordinary crowd, and who are for the most part destitute of even that amount of consideration for the safety and welfare of others which the members of an ordinary crowd possess, will not be any better ; and, as a matter of experience, we find that a crowd of patients going through a doorway will knock down and walk over their companions without hesitation or remorse. Hence it should be an invariable rule that when a large number of patients have to pass through a narrow entrance, the old, the feeble, and the demented should be passed through separately from the young and the robust. When going into the airing courts, the patients should first all be got ready. Then the doors are opened, and the young and robust are passed through first. After they are through, the old and feeble can be taken through with safety. The same rule should be observed in coming in. The rule for sending the hearty and robust first is founded on the difficulty of keeping them back when once the doors are open. When they see the door thrown open, they gravitate automatically towards it, and the effort to keep them back is in the direction of the greatest resistance. Pass them through first, and the feeble and therefore slower patients will not get in their way. For similar reasons, when a large number of patients are proceeding at the same time in the same direction, as, for instance, to the dining or recreation hall, they should be broken up into small parties with an interval between each. There need then be no jostling, there will be less danger of falls, and if a fall take place, there is less risk of the fallen patient being injured.

Falls from Obstacles.—It is most desirable that asylums should be so constructed that such obstacles as steps and scrapers are not placed at or near doorways. So placed they are constant causes of falls and constant sources of anxiety.

Falls from Defects in Flooring.—Other causes of falls are defects in the flooring, under which head are included defects not only in the wood or stone, &c., of the floor, but in the floor covering—the carpet or matting, or what not.

Every floor, whatever its material, when greatly worn, will become so defective as to be dangerous, and for this reason, that owing to inequalities in the hardness of the material employed, and the amount of traffic to which different parts are exposed, a floor never wears uniformly, but always assumes a surface which is irregular in proportion to the extent of the wear. It is these irregularities that constitute the danger, each of them being a possible trap to catch the toe of the person who treads on it.

Stone floors, and especially stone steps, usually wear into uniform hollows, but when stratified stone is employed the surface is apt to scale, and the hollows will then be bounded by an abrupt edge, which is very likely to catch the foot. All stones in this condition should be at once removed.

In tiled floors which have not been thoroughly well grouted, a tile here and there is apt to work loose, and then in washing the floor dirty water soaks under it. The water dries, but the dirt remains, and thus week by week the tile gets lifted more and more above the surface by the accumulation of dirt beneath it, until at last it stands sufficiently above the rest to be a source of danger. Or a small stone or lump of dirt gets under one corner, and then when another part of the tile is trodden on, it gives way. Loose tiles should always be attended to at once, rebedded or grouted in cement.

In wooden floors much subject to wear, the knots in time stand out prominently, so as to become a source of danger; or if one board is much softer than an adjoining board, it may wear so much more that the edge of the harder projects above the other. This is not, however, so common a source of danger as a loose board. The great danger of wooden floors consists, however, in the amount of polish to which they are sometimes subjected. The custom of polishing floors is a cleanly and a sanitary custom, and is certainly better than the system of perpetually swilling with water, which it has superseded; but it can easily be, and in many cases it is, carried to excess. A highly polished floor is risky for any one to walk on. For old and feeble people it is most dangerous; and the danger is especially great in the case of floors in old asylums which have previously undergone years of scrubbing. Such floors are commonly composed of 9-inch boards, which have had their upper surface distended by the incessant sopping to which they have been subjected. The consequence of the swelling of the upper side of the board while the lower side remains of its original dimensions is, of course, that the boards warp from side to side with the convexity upward, and in walking over a floor of this description one may distinctly feel that in surface it is a miniature reproduction of a well-drained field. It is a ridge-and-furrow floor. Now if these convex boards be highly polished, the danger of slipping on them is manifestly greater than that of slipping on a flat surface, and the greatest danger of all is when such a floor is covered by a small mat or piece of carpet. If the foot is placed on the mat, the latter slides off the curved and polished surface of the board, and a fall is inevitable.

A worn condition of the floor covering often constitutes a source of danger. Linoleum, which is most to be recommended for this purpose, is extremely durable, and when it at last wears out, it gives notice before

it becomes dangerous. The covering material wears very thin, and finally cracks, and as the edges of the cracks usually curl upwards, the linoleum at this stage is dangerous and should be renewed as soon as the cracks appear. In the same way the canvas backing of oil-cloth is laid bare by the wearing away of the covering composition before it too begins to wear into holes, and before this last stage is reached it should be renewed. Carpet gives no such notice that it is about to become dangerous, and when worn into holes, loops of string are left around the holes, which are extremely dangerous. The same is true, but in a much more pronounced degree, of cocoa-nut matting, and the sinnet, skeleton or rope mats. Cocoa-nut matting should not be used in any place save where the wear and tear are trifling, and the skeleton mats should not be used at all.

Stair-carpets, when used, require constant attention, and to be frequently shifted, so as to bring opposite the riser that part that was on the tread, and *vice versa*. Otherwise a crack will be worn in the carpet along the nose of the stair, which is extremely likely to catch the foot of any one coming down, and to precipitate him head foremost to the bottom of the stairs. Another matter that makes stair-carpets dangerous is when the rods that tie them into the stairs are loose. In such a case a person may tread on the rod, or more likely on the loose rag of carpet, which slips from under him, and gives him a nasty fall, usually backward.

Apart from the condition of the carpets, stairs and steps are often of themselves a source of danger. The particular case of steps at a doorway has already been noticed. Steps are also a danger to the general run of patients when exceptionally steep or exceptionally shallow. A low step of 2 or 3 inches will be found to be a continual source of falls. Even, however, when stairs are of ordinary construction, and in the ordinary position required for gaining access from one floor to another, they are a source of danger to those feeble and demented patients who are unable to appreciate the difference between a flight of steps and level ground, or who, even if they are capable of this flight of reasoning power, are not sufficiently intelligent to discern whether or no they have reached the bottom step in coming down, or the top step in going upstairs. Such patients should be accommodated in the dormitories on the ground floor, and if this cannot be done, they must be accompanied up and down the stairs when they have occasion to use them. In every case staircases should have hand-rails on both sides for the use of feeble patients.

SUFFOCATION.

Next to falls, the commonest source of injury to patients in asylums is suffocation, and there are few asylums in which deaths have not occurred from this cause. Accidental suffocation occurs in asylums (1) from the impaction of food in the throat; (2) from the inhalation of food into the windpipe; and (3) from obstruction to the nose and mouth by epileptics turning on their faces during their fits.

Impaction of Food in the Throat is by no means rare. The majority of the insane are greedy feeders, and are apt to bolt their food. The time allowed for meals is not excessive, and those who are helped last are anxious to get their share swallowed before the half-hour allowed for dinner is over, and they are compelled to relinquish the task. Many patients, general paralytics and others, have some defect in the nervous mechanism that regulates the movements of the tongue and those of swallowing; and, when all these causes combine, it will be no matter for wonderment that impaction of lumps of food in the throat, and consequent choking, is far from being an uncommon accident in lunatic asylums. The size of the masses that insane persons will attempt to swallow is surprising. In 1889, a patient in the Derby Asylum (Mickleover) contrived to swallow a horse-chestnut having a diameter of nearly an inch and a quarter, which became impacted in his gullet. In 1891 a patient in the Gloucester Asylum swallowed a pear bitten in two pieces only, which lodged in the gullet and caused his death. It is by no means easy to provide against the occurrence of choking, for it occasionally happens to persons who are not paralytics nor greedy feeders, and is effected by comparatively small quantities of food, and sometimes of food that has been well masticated or minced.

Precautions.—The following precautions are, however, necessary, and if duly taken, will at least minimise the danger of death from this accident.

Paralytics whose malady is beginning to affect their throat must be allowed soft food only, and so long as they are able and allowed to feed themselves, they should be allowed nothing larger than a teaspoon for the purpose. When the malady becomes more advanced, so that the throat is distinctly and decidedly affected, general paralytics should not be allowed to feed themselves, but be fed; and care should be taken that each mouthful is swallowed and disposed of before the next is administered.

It has been found by experience that general paralytics are most apt to choke when they have risen from the table and are walking about with their mouths full of food. The probability is that when the signal for leaving the table was given, the patient had not finished his portion

and, in his anxiety to lose none of it, he hastily crammed as much of the remainder as he possibly could into his mouth, and that it was from this cause, and not from the mere fact of his rising from the table, that his suffocation was due. Whether this be so or no, the rule is, at any rate, obvious—not to allow a general paralytic to rise from the table so long as he has food in his mouth.

(2.) The next precaution to be taken is to teach every attendant, as a regular and routine portion of his systematic training, the way to get the finger under the epiglottis and clear the pharynx of foreign substances.

(3.) A probang should be kept in the medicine-cupboard of every ward.

(4.) A medical officer should always be present, or at least instantly available; but it is better that he should be present in the dining-hall when dinner is proceeding. There are other and very obvious reasons for this rule, and it is one which ought to be observed in every asylum.

(5.) A complete set of tracheotomy instruments should always be kept in an accessible spot close to the dining-hall, and maintained in good order.

When these five things have been done, every precaution that it is possible to take against the choking of patients by impaction of food will have been taken; but even with all these precautions this accident cannot always be prevented.

Inhalation of Food into the Windpipe occurs usually in patients who are comatose. Occasionally, but not commonly, it occurs in persons who are conscious and alert; but usually it occurs during coma, and in coma it is exceedingly common. I have made or witnessed scores of post-mortem examinations of persons who had died in coma, and whose death was found to be due to the inhalation of vomited food into the trachea and bronchi. It matters not what the coma is due to; all comatose persons are liable to this accident; but those are, of course, most liable to it whose coma depends on some cause, such, for instance, as alcohol or chloroform, which of itself tends to produce emesis. In lunatic asylums the common cause of coma is, of course, epilepsy, and in the coma which follows epileptic fits it is by no means rare for patients in asylums to die from suffocation in this way. I do not know of any precaution that can be taken against this accident. We cannot prevent patients from having fits and becoming comatose; neither can we prevent them from vomiting during coma. It is quite impracticable to keep empty the stomach of every epileptic who is liable to have a fit, and there the suggestion of precaution must end. Nor is the question of treatment after the occurrence much more hopeful than that of precaution before. If a patient be actually vomiting while in a comatose condition, he should be turned over so as to lie on his belly and nearly on his face, his arms

being placed under his forehead so as to allow of the freest escape being given to the vomited matter ; but beyond this we are powerless. It is of little avail to open the trachea, for the food has, as a rule, been inhaled right down to the bronchi ; and if the patient could cough with sufficient efficiency to drive it out through the tracheotomy tube, the same expulsive effort would send it through the glottis, which is unobstructed. Little, however, as this operation can avail,—and in the cases in which it has been done it has availed nothing,—it is the only resource at our disposal, and it ought, therefore, to be tried.

Suffocation of Epileptics at Night.—The third source of accidental suffocation that occurs in asylums is the suffocation of epileptics by turning on their faces during their fits at night, and suffocations from this cause are more common than from both the others put together. In the fortieth report of the Commissioners in Lunacy no fewer than eleven deaths from this cause are recorded as having taken place within the year. Fortunately, this mode of suffocation, which is the commonest, is also the most easily preventable ; and under proper management it ought never to occur. Deaths from this cause take place, of course, always at night ; and it is to the vigilance of the night-attendants that we must trust for their prevention. Certain mechanical appliances have also been tried with this object, such as pillows composed of porous material, through which, it is claimed, the patient could breathe even though he did turn on his face. Recently an elaborate and highly ingenious pillow has been constructed of fine steel wire tangled together somewhat in the manner of horsehair, but much more loosely, and this, enclosed in a loosely woven cover, constitutes a pillow so porous that it is contended an epileptic could always get through it sufficient air to keep him alive. But these appliances, however ingenious, are, after all, of little use. In the first place, however efficient they may be, they can never be sufficiently so to enable us to dispense with vigilant watching ; and in the second place, if we have vigilant watching—and this we must have in any case—then we do not need the appliances. The fundamental mistake that underlies the recommendation of these porous pillows is the assumption that the breathing of patients during or after epileptic fits is similar to that of healthy persons. It may be allowed at once that a healthy person would not suffocate if he were lying on his face on one of these pillows, but even allowing this, it by no means follows that an epileptic after a fit would be safe in the same position. For the breathing after an epileptic fit is embarrassed ; the muscles of the nose, lips, tongue, and palate are more or less paralysed. What has to be feared is not the *obstruction* of the open anterior nares and of the open mouth by the impervious surface of the pillow, but the *closure* of the anterior nares and the *closure* of the lips by the *pressure* of the surface

of the pillow, whether this is pervious or no. It matters not how freely pervious the substance of the pillow is to air, if by the pressure of the head upon it the nose and mouth are so closed that air cannot enter them. Moreover, even if the porous pillow were efficient, and did prevent suffocation in some cases, it would still be wrong to depend upon it, or upon any appliance which appears to diminish the necessity of personal vigilance.

The only efficient precaution that can be taken against this mode of suffocation is, as has been said, vigilant watching; and in order that the night-watching may be vigilant, the arrangements described under this heading must be strictly enforced, especially that one which provides that not too many patients shall be placed under the care of any one attendant, and that other one which inculcates the necessity of grouping those patients who have "quiet" fits as near as possible to the attendant who has them in charge. Night-attendants in epileptic dormitories should be strictly enjoined to go at once to every patient in a fit, to take care that he is in a position to breathe freely, and not to leave him until the convulsion is over and the patient is motionless in the stuporose state in which the fit terminates, with flaccid features and relaxed limbs.

SCALDING.

Next to suffocation the most frequent source of accidental injury to patients is scalding, which is not very common, and which, when it happens, is almost always due to some breach of the regulations for bathing. Considering the large number of insane persons who work in the laundries of lunatic asylums, it speaks highly for the management of these essential appendages to asylums that accidents from scalding occur as seldom as they do. Nearly all the cases of accidental scalding have arisen from the neglect of an attendant in leaving a bath with hot water in it. Two rules for the management of baths should be absolute, and should be inculcated with the utmost stringency into the minds of attendants. The first of these declares the necessity of turning on the cold water first, and the second prohibits the attendant from quitting a bath while there is water in it. That cold water should be turned on first is a most important rule. There is a valve made which renders the turning on of the hot water before or together with the cold mechanically impossible, and this valve might advantageously be adopted in all asylums. It is to be observed that the rule declares that the cold water must be drawn *first*; and the rule is not complied with when both valves are opened together. At least two deaths have occurred in asylums in consequence of the rule being interpreted to mean that the hot water was not to be drawn first. In both cases the hot and cold were drawn simultaneously,

and the temperature of the mixture was high enough to scald fatally the patient who was immersed in it. An evident corollary from this rule is the further rule that no patient should ever be intrusted with the duty of turning on the bath water or allowed for a moment to possess the key of the bath.

The above include almost all the accidents that are at all likely to occur in lunatic asylums, for, in consequence of the care with which their lives are guarded and their proceedings watched, lunatics are to a large extent exempt from the common casualties of civil life. The danger from fire will be dealt with in a separate section. The remaining risks, which are few and infrequent, are such as mistakes of liniment for medicine or other drink, and almost invariably occur from the breach of some obvious precaution, usually from a patient obtaining access to some room or cupboard to which access ought not to have been permitted.

FIRE.

The taking of precautions against fire, and the provision of appliances to deal with fire, should one break out, constitute two of the most important duties which the managers of asylums have to perform. The outbreak of a really serious fire in a building occupied largely by demented and incapable persons is an event not to be contemplated without horror; and this feeling is by no means diminished by the accounts with which we are familiar of cases in which such an event has actually occurred, and has been attended by terrible loss of life.

The duties of asylum managers, with reference to the possibility of the occurrence of fire, are threefold, and include, first, the precautions that have to be taken to prevent fire; second, the means that have to be provided to secure the safety of the patients in case a fire should occur; and third, the means that have to be provided to extinguish fire.

PRECAUTIONS IN CONSTRUCTION.

Precautions against the occurrence of fire begin with the construction of the building. It does not enter into the plan of this book to give rules for building, but the following matters should be attended to in the original construction of the asylum.

It is well known that insurance offices will rate as second-class any house whose party walls are carried no higher than the eaves. In order to be rated first-class, the party wall must be carried up completely through the roof; the reason being, of course, that such a wall affords a safeguard against the spread of fire from adjoining houses. A similar precaution should be adopted in those asylums which are built on the

gallery system, and present a very long stretch of roof area. An occasional dividing wall carried above the roof would do much to limit a fire, should one unhappily occur.

Buildings with a mansard roof are considered liable to increased risk of fire, and are rated second-class. Asylums should not, therefore, be so built.

Fireplaces should be carefully set, and the spaces behind and around them filled up solid with brickwork. Any hollow left communicating with the flue is likely to get filled up with soot, which forms in time a glowing mass, and tends to set fire to any plugs, grounds, or other woodwork in its neighbourhood.

All flues should be properly pargetted with cow-dung.

All chimneys of exceptional calibre, such as those of furnaces and bakehouses, should be built separate from the walls of the building.

The smith's and carpenter's shops should be in detached buildings. The carpenter's shop should have no fire, but in its place a slab of stone or brickwork on which should be fixed a Bunsen burner for heating the glue-pot. The tailor's goose should be heated by similar means.

India-rubber tubing should not be used in connection with gas-stoves. They are liable to crack in course of time, and also to melt near their connection with the stove.

Pipe stoves should not be allowed in asylums.

All steam and hot-water pipes should be fixed a clear three inches from woodwork of any kind throughout the whole of their course.

All gas-pipes should be iron barrel. The composition piping is unsafe anywhere; it is most hazardous where it is within the reach of patients.

Gas-lights should be placed in such a position or at such a height that patients have no access to them.

PRECAUTIONS IN MANAGEMENT.

No patient should be allowed access to matches.

No attendant should be allowed to use any matches but those supplied by the asylum. Of these he should be allowed but one box, and should be made to deliver each box before receiving another. The object of the rule being, of course, to render it impossible for him to give his box, and with it the means of lighting matches, to a patient.

Patients are not to be allowed to make up fires.

Coals are not to be piled high upon fires, or they may fall off when alight and set fire to the room. Fires are to be lit by paper or shavings and wood, and not by paraffin, nor by carrying live coals from another fire.

Wood is not to be put inside the fireguard over night to dry for kindling next morning.

Candles and oil lamps are not to be allowed in asylums.

Attendants are to be cautioned to see matches extinguished with which patients have lit their pipes.

The waste ashes from fires must never be carried in boxes or any but metal receptacles. They must not be deposited in or near the building.

The most probable sources of fire in an asylum are the stage, the laundry, and the carpenter's shop. It should be the duty of the head-attendant, on every occasion on which the stage has been used, to go round it the last thing after every one has left, and inspect thoroughly the flies, wings, and dressing-rooms, to make sure that no smouldering source of fire has been left.

The usual source of fire, when one occurs in an asylum, is the laundry. Hence special care is required in both the construction and the management of this department. All steam and hot water pipes should be carefully fixed away from woodwork ; as much should be done by steam and as little by fires as possible. With the improved apparatus now in use, there is no need for a fire in any part of the laundry. This is not, however, true of the ironing-room, and in this room the danger is greatest. There must be a stove to heat the irons, but if this stove is of gas, and not of coal or coke, the danger is reduced to a minimum. A probable source of fire in ironing rooms is a habit of the ironers of allowing their irons to become too hot, of trying them on a piece of waste rag or paper, which scorches, and of throwing this trial fragment away. If much scorched, it may go on smouldering in the place in which it is thrown until it becomes the source of a dangerous fire. It must be remembered that in an ironing-room everything is usually as dry as tinder, and is heated to a considerable temperature, an additional reason why this department should be looked on as the most probable place of origin of a fire, and an additional reason why it should be situated in a detached building, and visited periodically by the night-attendants.

The quantity of shavings usually lying strewn about the carpenter's shop renders it always a dangerous place for a light to be introduced into or for a fire to be made in. It should therefore always be a detached building, separated by at least twenty yards from the nearest portion of the main structure. The gaslights with which it is lighted should be pendants, never brackets, and should have the flame enclosed in a globe after the pattern of those already described for the wards. Since the carpenter's shop is not a living room, it is too often considered that no care need be bestowed upon it, but that anything is good enough, and it is rarely that any precaution about the gas is taken further than to enclose the flame in a globe of wire, which is scarcely any protection, since a grain of dust falling into the burner may cause a tongue of flame to project an inch beyond the wire globe, and which sorely obstructs

the light. As already said, the coal or coke fire should be abolished, and a ring-burner of gas substituted for heating glue.

The main precaution against fire is, however, the system of periodical visits of a night-watch to all parts of the asylum at intervals of not less than one hour throughout every night in the year. When this system is in force, there is scarcely any danger of a fire reaching really formidable dimensions.

Provision for the Safety of Patients.—If a fire should unhappily occur in spite of all the precautions above enumerated, and should have attained dimensions beyond the capability of a bucket or two of water to extinguish, the first thing that has to be cared for is the removal of the patients to a place of safety. It must be remembered that when fire gets a really firm hold of a building, it spreads with astonishing rapidity. The means of exit which are needed to escape from a fire must therefore be so ample as to appear to inexperienced observers unnecessarily so; and since it is always presumable that one exit will be excluded by the fire, alternative exits from every dormitory are essential; and since dormitories are usually on upper floors, alternative exits from them mean additional staircases. This, of course, is a great expense, but it is a necessary expense, and one that must be incurred. These escape-staircases are for use only upon such an emergency as fire. They are not for ordinary use, and as it is essential to their being available when required that they should never be master-locked, an additional difficulty is thus created. It is necessary to contrive some means by which the staircases may be instantly available—that is to say, by which the doors leading to them can be instantly unlocked by any attendant when real need arises; and yet this means must be such as to prevent the clandestine use of the staircase by attendants for improper purposes. These apparently inconsistent requirements have been met in a highly ingenious manner. The key of the extra staircase is placed in a box with a glass front, which is fixed against the wall. The only means of obtaining the key is by breaking the glass which encloses it, and the breaking of this glass sets the fire-alarm in action and apprises the whole neighbourhood of what has been done. The glass-fronted box is fixed inside the room of the charge or nearest attendant, so that patients do not have access to it, and it is usual to render opaque that portion at least of the glass which covers the wards of the key, so that an attendant of ingenious turn of mind may not alter his own key into conformity with them, and thus be able to use the staircase at his own convenience. Care must be taken that the glass covering is thin—15 oz. glass is all that is needed. In the 43rd Report of the Commissioners in Lunacy an account is given of the attempt of two Commissioners to break the glass covering of the

fire-alarm at Banstead Asylum. They tried first with an umbrella, but abandoned this method, apparently from fear of injuring the implement, and took instead a broom, with which several ineffectual blows were struck, but after some "very violent" blows had been struck with the head of the broom, the thick glass was at length broken.

Locks of Single Rooms.—Among the provisions for the safety of the patients in case of fire, not the least important is the method of fastening adopted for the single rooms. Where these are fastened with a key only, it is evident that much most valuable time must be lost by the attendants in going from door to door, and stopping at each one to find the keyhole, insert the key, unlock and open the door, extract the key, and pass on to the next. On this account, if for no other—and there is another reason of great cogency—all single rooms should be made to open by an ordinary door-handle, and should be secured at night by the spring bolt alone, which this handle withdraws. A deadlock may, if required, be added, to be operated by a key, but for ordinary night use a handle and spring bolt only should be provided.

Removal of Patients should be Practised.—Attendants should be fully instructed, and should from time to time be exercised, in the removal of patients from the dormitories as if on the occasion of fire. The trial alarms of fire, when given for the practice of the staff in the use of the fire apparatus, are always given in the daytime; but it is obvious that such an alarm does not reproduce with accuracy the conditions that would obtain were a real fire to need extinguishing. In the daytime a dangerous fire scarcely ever occurs, and, should it do so, the patients are already up and dressed, and for the most part on the ground-floor, and all that the staff are practised in is the less important duty of handling the fire-hose, while in the more important duty of removing the patients they are not exercised. Of course it is not intended that the entire establishment of a large lunatic asylum should be aroused in the small hours of a bitter winter night for the purpose of an experimental test of the fire arrangements; but a real and stringent test of the arrangements can be enforced without resorting to such extreme measures as this. In most asylums the day-attendants come on duty in the summer at 6.30 or 6.45 A.M., and the whole asylum is astir by seven. Let the superintendent bestir himself two or three times during the summer months to rise at five, and go round the wards of the asylum. Even if he do nothing more, he will lose nothing by taking this course. When I was in charge of a public asylum, I made a point of visiting the wards on one day or another in every hour of the twenty-four, and I know of no course better calculated to keep the attendants up to their duty. Being in the wards between 5.30 and 6.30, the superintendent should choose some ward in which to give the alarm

of fire. He will then enforce a real test of the efficiency of the arrangements for saving life, and the only inconvenience to which he will put the patients and the staff will be that of rising an hour or half an hour earlier than they are accustomed to—a change that to many of them will not be disagreeable.

Other means of escape supplementary to the provision of additional staircases may be provided, although the main reliance must always be placed on these. External fire-escapes have their use, and every ward above the ground-floor should have one window capable of being widely opened and having a canvas shoot attached to it, through which patients may be lowered in safety to the ground.

FIRE-EXTINGUISHING APPARATUS.

A complete system of fire mains and hydrants for the extinction of fire should be provided in every asylum; a fire-brigade should be formed among the staff, and every individual employed in the care of the patients should be regularly exercised in the use of the various appliances.

There should be two sets of fire mains, one outside, the other inside the building.

The outside fire main should completely encircle the main building, at a distance, in two-storey buildings, of about 35 feet. It should be broken by as few curves as possible, and on this account should be taken under, rather than round, small projecting blocks. It should be 4 inches in diameter, and should be fitted with unions for standpipes at intervals of 60 or 70 feet.

At the nearest point of the wall of the building to the union should be fixed a box, locked by the lowest key in the suit, and therefore accessible to every official, to contain the stand-pipe.

Inside the building a rising main should be fitted near every staircase, and at each landing should be fitted with a union for hose. These unions, while in every case near to a staircase, should at the same time be so placed as not to interfere during use with the traffic up and down the stair. Sometimes draw-off taps are fitted to the fire main; this is totally wrong. The fire mains should be entirely distinct from every other water supply and should be put to no other purpose. Near to the rising mains on every floor should be suspended coils of hose, sufficient, when connected, to reach to the farthest point of that floor of the building, and in a glass-fronted box should be kept the branch and spanner.

Canvas hose should be used, as the leather hose is neither stronger nor more durable; it is, moreover, heavier, and has the great disadvantage

that it requires to be kept oiled, and consequently spoils the clothes of those who use it. For this reason practice with the leather hose will never be as frequent as with the canvas, and without frequent practice the apparatus is of little use.

Extinctors, grenades, buckets, &c., are not of much avail in dealing with a serious fire, though they may be usefully employed when it is quite of manageable dimensions. Buckets and hand fire-engines, if provided, should always be kept filled with water, and the responsibility for keeping them filled should be fixed upon one individual, by preference the charge attendant of the ward.

Fire mains, and all the apparatus of hose and stand-pipes, and the exertions of the fire-brigade are useless without an efficient set of pumps. It is manifestly useless to trust to the force of gravitation to throw the water, as it should be thrown, over the roofs of every part of the asylum, and efficient pumps driven by a steam-engine of adequate power, say 7 or 8 horse power, must be provided. These pumps, and the engine that works them, together with the boiler that creates steam for the engine, should all be in duplicate, so that, in the event of one of them being thrown out of action or under repair, the other can be taken into use. It is always to be remembered that when a fire does occur, it is certain to occur at the most inconvenient moment, either when the engineer is away for his holiday, or when the water supply is at its lowest, or when a pump, a steam-engine, or a boiler is out of order. Provision must therefore be made that, however unfavourable the circumstances of the moment, efficient means always exist of dealing with a fire.

The boiler-house, engines, pumps, well, and water-tower will, of course, always be in close proximity.

To make the provision against fire complete, an efficient fire-alarm is an absolute necessity, and the best form of alarm is undoubtedly an electric apparatus, provided—and the proviso is most important—that this, in common with every portion of the means for dealing with fires, is frequently tested and kept in good working order. The batteries must be kept in an accessible place, and must be examined by routine not less often than once a month, and (supposing that they are, as is usual, Leclanche cells) filled with water, and the zincs and sal-ammoniac renewed if necessary.

On every floor of every separate block, in every separate department, a push should be fixed, and the use of one of these pushes should do three things. First, it should start a steam-buzzer, which should be sufficiently powerful to be heard not merely distinctly, but very loudly, in every part of the asylum premises. Secondly, it should work an indicator placed in a very central position in the asylum, and showing

plainly and unmistakably in what part of the building the push has been sprung. Thirdly, it should ring a loud alarm in the houses of the engineer and the superintendant.

In some asylums the electric alarm consists of a number of bells, which ring in various parts of the institution ; but this is not an arrangement to be commended, for the noise made by even the largest bell is not to be compared with that made by a buzzer, and the object of the alarm is to arouse not merely the inmates of the asylum, but the whole neighbourhood, and especially the married attendants, who at night will be at home in their own cottages detached from the asylum. Moreover, the noise of a buzzer is so penetrating and so distinct from all other noises as to compel immediate attention.

In order that the buzzer shall always be efficient, and in order that the pumps should always be available, it is of course necessary that a certain pressure of steam should always be maintained, and for this reason there should always be a stoker on duty both night and day.

The pushes of the fire-alarm are fixed in boxes which can be opened by the keys of lowest rank, and are placed in conspicuous positions, painted in conspicuous colours, and legibly labelled "fire-alarm."

The wires should of course be cased in.

The fire-brigade should be under the instructions of the engineer, and every male on the staff should be compelled to take part in the practices, which should be held at least once a month. The whole of the male staff should be instructed, upon hearing the fire-alarm, to make at once for the central point at which the indicator is fixed, and having discovered from the indicator the seat of the fire, to proceed thither, the head-attendant or other superior official who is first on the spot throwing open the doors that have to be passed through.

All attendants, both male and female, as well as the cooks and laundry-maids and other female servants, should be instructed in the method of coupling up and using the hose. It is no use telling them. Each must be individually shown how it is to be done, must be made to do it, and to do it sufficiently often to become well practised and familiar with the acts required, so that in case of need there will be no bungling.

There should be no confusion and no excitement. Every individual should know exactly what he or she has to do, and should proceed about his duty with the regularity of a squad of engineers. For all this the engineer should be responsible, and if he is a competent man, his superior officers should not attempt to interfere with him, but should give him a free hand without intermeddling with what he must know better than they.

CHAPTER XX.

CLEANLINESS.

IN regard to their cleanliness, patients in an asylum require very much the same amount and kind of care as is required by children. Some, like elder children, may be trusted to do many things for themselves; others, like younger children, must have everything done for them, but all require careful attention as to their personal cleanliness. Most require continual interference and reminding, and many need to be treated with the same solicitude as infants in arms, in order to preserve them from the evil consequences of their own filthy habits.

The first thing in the morning, when the patients are got out of bed, care should be taken that they wash properly. If not supervised, they will dress first, and then wipe their faces over with a wet towel. Those who cannot or will not wash themselves must, of course, be washed by the attendants. Patients whose habits are dirty should be bathed every morning as a matter of routine, whether they seem to require it or no. Female patients should do their hair, or have it done, before going into the day-room. The charge attendants are responsible for every patient being neatly and tidily dressed, clean, hair neatly arranged, before sitting down to breakfast. The second attendant is responsible for the stockings being pulled up and gartered and the boots fastened.

Before each meal those patients who have been employed in the interval wash their hands, all have their hair tidied, and their dress arranged, those who are incapable of attending to themselves being again assisted. Before going to bed, dirty and dribbling patients, and those with sweaty hands, have their hands and face washed, but the rest of the patients need not wash unless they desire to do so.

Bathing.—Once in every week every patient who is not ill in bed is to have a bath. The following rules for bathing are indispensable; others may of course be added at the discretion of the authorities:—

1. On general bathing nights the head-attendant is to be present.
2. The cold water is to be turned on first, and when enough has been drawn, it is to be turned off and the hot water turned on.
3. The bath must always be tested with the thermometer before the patient is allowed to enter it.
4. No bath must exceed 100 degrees or be below 80 degrees without medical order.
5. More than one patient must not be bathed in the same water.
6. The bath must not be left by the attendant so long as there is water in it.
7. When the bathing is finished the waste must be left open.

The head-attendant superintends the bathing and takes the temperature of the water. The charge and second attendants cut the patients' nails and see to their hair. The under-attendants do the bathing. On the female side the matron, and on the male side a medical officer, should from time to time be present during the bathing, to see that it is properly performed and that the rules are observed.

The bathing should be conducted with all possible decency, and care should be taken that a crowd of naked patients does not accumulate. The bath-room, where it is single, should be placed between the ward and the dormitory. Patients can then partially undress in the ward, pass into the bath-room one by one as the bath is made ready, and go straight from the bath-room to bed. In general bath-rooms, curtains or screens should be provided between the baths, and care should be taken that they are used.

The more sensible patients should be allowed to bathe themselves. The remainder are bathed in the following manner :—The patient first lies down in the bath, so as to immerse himself completely for a moment and to wet his skin all over. He then stands up and is rapidly brushed over with a flesh-brush, previously well soaped. After this scrubbing, he dips again into the water to wash the soap off, and gets out of the bath, which is at once emptied. The attendant then takes a large sponge, wrung out dry, and runs it rapidly over the patient's body, taking off all the adherent moisture and leaving the skin damp, but scarcely wet. The drying is then completed with a towel. The use of the sponge in this way is important, for if it be not used, it is not possible for a patient to be completely dried by the use of a single towel, and more than one towel is never allowed. The consequence is that either the patient is only half dried, and runs the risk of catching cold and making his bed damp, or perhaps getting an attack of pneumonia, or resort is had to some illegitimate means of drying him. The most usual of these means is the employment of sheets as towels, a practice which is extremely common in asylums; indeed, in many asylums towels for bathing are not distributed, and sheets alone are used for drying the patients, a practice which is, to say the least of it, objectionable. Whatever the agent used, care must be taken that the bodies of the patients are thoroughly dried. There is little doubt that the frequency of pneumonia in asylums is to be attributed in part to the lack of sufficient care in drying the bodies of patients after bathing in cold weather, especially in asylums in which a general bath-room at a distance from the dormitories is employed.

Once a week, too, the heads of patients should be combed with a fine tooth comb, and attendants should of course have instructions to report the existence of vermin, should any be found. Should this be the case,

the hair should on no account be cut short, but be treated in the usual way with an insecticide lotion.

The heads of female patients should not be wetted on bath nights, but should be left for another night set apart for the purpose, when time can be given to dry them thoroughly and properly. When their heads are washed on bathing nights they do not get thoroughly dried, partly from lack of time, and partly from lack of towels. The consequence is that the patient is very apt to catch cold, the pillows are spoilt by the damp, and the patient's hair acquires a disagreeable musty smell which is difficult to get rid of.

Dirty Habits.—Patients who are of dirty habits need constant attention, and are a source of continual trouble in asylums; but fortunately by assiduous attention very much may be done to cure them of their objectionable customs.

Causes.—The first thing to be done with a patient of this class is to discover if possible the reason for the fault. It may be that he has actually lost control over his sphincters; but except in the case of general paralytics in their latter stages, this is one of the rarest causes of filthy habits in the insane. It is to be remembered that when, from spinal disease, control of the sphincters is lost, that of the bladder is impaired before the sphincter ani; and that when the sphincter vesicæ is losing power, the urine is not passed in large quantities at intervals, but dribbles continually away. Hence, in true loss of sphincter control, the first symptom invariably is this dribbling of the urine. But in the dirty habits of the insane, dribbling of the urine is extremely rare. What happens is that the patient passes urine or fæces, or both, in the usual quantities, and at usual intervals, but instead of seeking and using a proper receptacle for the purpose, he passes it “under” him—that is to say, in his bed at night, or in the daytime in his clothes.

It is a well-known fact that in children, after the control of the sphincters has become established, as a general rule, it is apt to fail at times and under special circumstances. It is no uncommon thing for the sphincter vesicæ to fail during sleep, for instance, and for children to have a habit of wetting their beds. It is not either a very uncommon thing for young children to make a mistake, and suddenly and unexpectedly to pass a motion, when perhaps they intended to pass flatus, or on sudden exertion. Children almost invariably “grow out of” these habits—that is to say, as they grow older, and their nervous systems become thoroughly organised and consolidated, the control which was at first imperfect becomes complete. Now, demented in many respects resemble children in their nervous organisation. The process of building up the nervous system has in their case been reversed. The organisation has been undone, the building has been pulled down, and thus the

stage of construction at which they have arrived is much the same as that of the child, though they have arrived at it from an opposite direction, and such patients are liable to sudden and unexpected lapses into uncleanness. Such lapses are liable to occur on any occasion on which the general tone of the nervous system is lowered. In such patients the first symptom of some serious illness may be a dirty bed, and for this reason a patient who makes a lapse of this kind for the first time should always be carefully examined. They are also liable to occur on the occasion of any sudden fright or violent emotion. Even in strong and healthy people the effect of the "funking room" is well known, and we read in the "Famous Historie of Fryer Bacon" how one of his victims "bepissed himself for feare." That which may occur on strong provocation in healthy persons may occur on trifling provocation—the slamming of a door or the fall of a plate—in those who are morbidly weak.

In some demented the dementing process has gone so far as to reduce them to practically the same condition as infants in whom the control of the evacuations has not begun to exist. They pass normal motions at inappropriate times and seasons from sheer lack of mental ability to recognise the error of their conduct.

There is another class of uncleanly patients whose faulty habits are due to sheer laziness and indolence. Such a patient will pass his water in bed, because, of the two evils of lying on a wet sheet or getting out into the cold to pass water, he prefers the former.

Others again are dirty from a malicious desire to give pain and trouble. They have a grudge either against a particular attendant or against mankind in general, and they take this means of satisfying it by doing that which they know to be offensive and objectionable.

Lastly, there are those who not merely pass their excrement under them, but who proceed thereupon to knead it with their hands, and to daub it all over their persons, their clothing, and their apartment. These superlatively filthy patients are again of two classes—first, those whose dabbling in filth is the result of stupidity, who are dazed and demented, and whose action may be due either to some futile intention of clearing the mess away, or to non-appreciation of its nature; and, secondly, those who know quite well what they are doing, and take an insane delight in the filthy occupation.

Treatment.—The ways of dealing with uncleanly habits will, of course, differ to some extent, according to which of the above categories the patient is to be placed in. If there is a true incontinence due to spinal disease, there is, of course, nothing to be done beyond the ordinary medical and nursing treatment.

Cases in the second category are much more hopeful. Patients who make occasional lapses owing to temporary deficiency of control of the

sphincters, may usually be greatly improved, and often entirely cured of their fault. Since the defect is due to inability of the higher nerve regions to maintain their control over the lower, it is, of course, increased by anything which diminishes the efficiency of the higher nerve regions, and is improved by measures which cause them to act more efficiently. The object to strive for is therefore clearly to produce some amendment in the condition and action of the higher nerve regions. These we can influence indirectly only, but we can influence them considerably by a suitable regimen, and by paying attention to the general health. By giving plenty of good food, a small amount of stimulant, plenty of open-air exercise, and with the help of an occasional Turkish bath, we can improve the general health and the tone of the nervous system to such an extent as to render improbable the event that we wish to avoid; and by having the patient taken frequently to the closet, we can minimise the occasion for such an event by keeping the rectum and bladder empty.

The next class of patients, those who are dirty from sheer indolence, can always be cured. The mode of treatment with them is to make it more troublesome to be dirty than to be clean. For this purpose they are compelled to get out of bed and make water, or go to the closet, at least three times every night, until the fulfilled promise, given overnight, of a clean bed, renders such a course unnecessary. These are suitable cases for holding out inducements to cleanliness by withdrawing some privilege, and making its restoration contingent on an improvement in the habits.

Patients who are dirty from sheer malice and from a desire to give trouble are a very difficult class to deal with. Taking such patients to the closet, however frequently that ceremony may be performed, is of no avail with them. They will go again and again, and after perhaps half an hour passed in sitting there, they will come away and immediately mess their clothes. Such patients may sometimes be influenced by kindness, sometimes by an appeal to their pride, sometimes by the withholding of privileges, but in no case is the task a very hopeful one, and they will often continue their habits in spite of all that can be done. The best hope is that their insanity may be diminished, and as their malady improves, so will the habits on which it depends.

The last category of patients comprise the most objectionable of all. Such patients are always made the tenants of single rooms, in which they are for the most part left during the night to their own devices, and discovered in the morning in a condition of indescribable filth; and this course is in many asylums unavoidable. But in an ideal asylum, in which the number of attendants is not limited by necessary considerations of economy, such patients would have a special attendant to

remain with them at night and to prevent their indulgence in such practices. With the first of the two classes into which patients of this category have been divided the prevention would then be very easy; and with the second it would not be difficult.

Whatever the cause of this uncleanness may be, every dirty patient should be trained into habits of cleanliness by being compelled to attend the closet, not only at frequent intervals, but, what is most important, at regular times. The nervous system as a whole, and in especial the nervous mechanism of these particular functions, is so much the creation of habit, that when once, by persistent training, a habit is established of exercising these functions at fixed intervals and at regular times, the nervous system will be broken into conformity, and the habit will at length become unmodifiable by the individual. For this reason patients who are wet or dirty at night should be taken up at least three times, and always at the same time every night, and given the opportunity of evacuating.

This plan of getting the patients up at night is practically efficient for this, among other reasons. In the second class of unclean patients, those who are so from the want of sufficient controlling power, this power varies with and depends upon the efficiency of the higher nerve region. Now in sleep the higher nerve regions are put out of action, and the deeper the slumber the more completely is the action of these regions annulled. This is the reason why so many children who are perfectly clean by day wet themselves at night. This is the reason why so many demented display the same peculiarity. This is the reason why a man who holds his water perfectly well in ordinary sleep floods himself with urine when he is in the profounder sleep of drunkenness. This, too, is the reason why so many epileptics are wet or dirty, or both, in the coma that follows their fits. Hence if we can prevent the patient from sinking into too profound a slumber, we can oftentimes prevent him from wetting his bed; and thus it is that the mere fact of waking a patient and getting him up is enough to prevent him from wetting his bed, even although when he gets up he may not pass water.

In the daytime these patients should be taken immediately after each meal; and in every ward in which demented patients are, a regular practice should be made of making them attend the closet or the urinal immediately after every meal. In this way the habits of patients may be improved to a very surprising extent; and if these directions be followed, a large asylum of a thousand beds may maintain an average of not more than six wet beds every night, and not more than the same number of dirty beds every week. Of course, to carry out this plan systematically, a sufficient staff of attendants both by day and by night are required, but the saving in laundry-work, and the saving of

destruction of clothing and bedding, will go far to diminish the expense, to say nothing of the advantage, not only to the patients immediately concerned, but to all the other inmates of the asylum.

Another precaution to be taken with patients who wet their beds is to restrict the amount of liquid that they take during the latter part of the day, and to pay some regard to its nature. Such patients should not be allowed access to the water-tap. They are often people who are in the habit of drinking great quantities of liquid, and to this habit their fault is to some extent due. Care should be taken that they do not so indulge, and they should be limited to half a pint of fluid with their evening meal. This fluid should not be tea. The tea provided in public asylums is seldom of superlative strength, and weak tea has on some people a strongly diuretic effect.

Besides actually taking these patients out of bed, which should be done every three or four hours, the night-attendant should at each visit—that is to say, every hour—examine their beds to see if they are dry; and if they should be wet, they are to be at once changed, a dry mackintosh and dry sheets placed on the bed. Every such patient should be examined by the night-attendant before he goes off duty, and every bed should be dry and clean when the day-attendants come on.

NEATNESS OF APPAREL.

The cleanliness and tidiness of the patients' clothing is another matter that has to be assiduously cared for. All buttons and fastenings of every kind must be kept in good order, and the attendants must see that they are used.

Male patients must have their collars buttoned and turned down over their neckties, and the necktie fastened well up to the collar-button, and not a gaping interval of two or three inches left between the top of the tie and the button of the collar. Their waistcoats should be kept buttoned, and those who persist in throwing their waistcoats open must have them sewn together every morning opposite the first and fourth buttons. Those who unbutton their trousers must have them also sewn in two places. For such patients the old-fashioned trousers with flap or cod-piece are more appropriate than those with a fly.

Female patients should have attention paid to their hair, which is apt to be untidy in demented patients, and which some patients have a habit of pulling down, however often it may be arranged and put up. For these patients the hair must, after being plaited, have the plaits sewn together each morning, and the threads cut and the hair taken down every night. It matters not how persistent a patient may be in pulling down her hair, the habit can always be overcome in this manner.

Female patients should never have their hair cut short except for some disease therein.

Collars and cuffs of crotchet or some such work should be allowed to those patients who choose to make them for themselves. They add greatly to the neatness and becomingness of the patient's attire; they are a source of great gratification to the wearers, and they are of material advantage in treatment, as tending to increase the self-respect and improve the personal demeanour of the patients. Such small adornments need not go to the laundry, where they are very apt to be lost, damaged, or exchanged for those of some other patient, but the patients to whom they belong should be allowed to wash their own.

Female patients who undress themselves at wrong times should have their dresses made to fasten at the back, and should have them secured at the collar and waist with a few stitches. This is much better than using locks, which proclaim to every spectator that the patient's habits are faulty. Locks may, however, be used on boots, on which their presence is not conspicuous. Care must always be taken that the stockings do not fall down about the heels.

Exceptional Dresses.—The number of dresses that are exceptional, by reason either of the nature of the material or the pattern after which they are made or the mode by which they are fastened, should be as small as possible. Much may be done in this direction by the method of sewing on the dress as already advised, and much may also be done by the employment of material which, although strong enough not to be torn without great difficulty, is yet not conspicuously exceptional in its appearance. Such a cloth is made by Milner of Chidswell, near Dewsbury, and answers its purpose well.

Bibs.—A plentiful supply of bibs should be kept in every ward, and every patient who is careless and uncleanly in feeding should have one put on at meal-times, while those patients who slobber should wear bibs at all times.

Changes of Linen, &c.—The supply of linen is a matter of great importance, and, judging from the Reports of the Commissioners in Lunacy, there are not many asylums in which the supply is adequate. Two under-garments per week should be allowed to every patient, and the stock of clothing and the capacity of the laundry ought to be sufficient to permit of this allowance being made. Every male patient should have two clean shirts per week or a shirt and a night-shirt, and every female patient should have two clean shifts or combination garments, or one and a night-dress. The custom of wearing the same under-linen both night and day is not one to be commended, and night-shirts for the men and night-dresses for the women should always be provided.

Flannel under-clothing should always be supplied to aged patients, and this also should be changed every week.

Every patient should have a separate towel, which should be changed after bathing-night, the towel being used for the last time on that night and a clean one provided for use the next morning.

Once a week the top sheet on each bed should be placed at the bottom, the bottom sheet being sent to the wash and a clean sheet placed at the top.

Pillow-cases should be changed once a week.

Male patients who work on the land or in the artisans' shops should have clean trousers every week ; the others may go a fortnight.

Female patients should be allowed two petticoats—an under of flannel, and an upper of some other material, and each of these should be changed once a fortnight on alternate weeks.

Patients of dirty habits must be changed as often as is necessary.

PART V.

THE STAFF.

CHAPTER XXI.

THE STAFF OF ASYLUMS.

THE staff of an asylum consists of two orders of officials, not entirely distinct, but partially so : first, those who have the immediate care of the patients ; and second, those who minister to the material wants of the inmates. In the first class are the medical officers and the attendants of various grades ; in the second are the steward, matron, cooks, artisans, and other servants.

In organising the staff of this or any other institution, two fundamental requirements have to be satisfied. First, there must be a strict and definite distribution of responsibility ; and second, there must be an efficient system of supervision.

RESPONSIBILITY.

The distribution of responsibility can be secured in only one way. Every member of the staff must have his or her duties clearly defined in a scheme of regulations of the most complete and detailed character, and measures must be taken to secure that he or she is thoroughly familiar with the regulations by which he or she is bound. The greatest care must be taken that the sphere of each person's duty is clearly defined ; that there are no neutral zones or doubtful boundaries, either in time or in matter, which may render it uncertain to whom this or that duty belongs, and that the several duties assigned to any one person are not incompatible with each other. Not only is it necessary to define clearly *for what* each person is responsible, but it is essential also that it should be clearly understood *to whom* each person is responsible. Every one should know to whom to look for orders, and the orders that each person receives should come from a single source, otherwise there is sure to occur some incompatibility between the orders received from one source and those received from another. No man can serve efficiently two masters. For this reason, orders given by any official to those who are not his imme-

mediate subordinates should not be given direct from him to them, but transmitted through every intermediate grade between him and them, and be delivered to the ultimate recipient by his immediate superior. Of course an order given *in the presence* of an intermediate official is equivalent to one transmitted through him; the object being to ensure that he shall know what duty has been assigned to his subordinate, and that the subordinate shall be aware that he knows. Thus, not only is the subordinate made responsible for performing the duty, but the superior is made responsible for seeing that the duty is performed. Moreover, the subordinate cannot plead, in excuse for neglecting a duty imposed by the superior, another duty of which the latter knows nothing, imposed by the superior of both.

The supreme control of an asylum resides in the Committee of Visitors, from whom, directly or indirectly, all authority of officials is derived. The Committee, during their absence, delegate the management of the asylum either entirely to the superintendent, or to him and other chief officials in assigned departments. Beneath these again is a regular hierarchy of officials, each of whom is responsible to his immediate superior. Care should be taken in the organisation of the staff that every official is definitely included in one department, and is responsible for certain definite duties.

Never should it be forgotten in the management of a staff that *power and responsibility cannot be separated*. This expression appears on the face of it to be a truism, but in practice it is often disregarded. It appears a truism to say that no one can be responsible for that being done which he has no power to prevent, or for that not being done which they had no power to do; but, as a matter of fact, the power of doing or not doing can be interfered with in so many ways that the interference is not always recognised, and responsibility is often wrongly apportioned in consequence.

Among the most frequent of the ways in which power is interfered with without a corresponding reduction of responsibility being made, is by the diminution of the *authority* of superior officials over their subordinates. A hasty, a thoughtless, or an ill-tempered superintendent will reprove an official in the presence of that official's inferiors, and by so doing will impair his authority, so that his orders are no longer regarded as imperative by them. Thus his power of controlling them is diminished, and, while his responsibility is *ipso facto* diminished correspondingly, he is often held as responsible as before for the behaviour of his subordinates.

It follows from the principle above enunciated that the powers of every official should be clearly defined. Only by so doing can responsibility be definitely fixed. So long as it is doubtful whether an official has power to perform a certain duty, so long is it impossible to fix upon him any responsibility for its performance.

For instance, a charge attendant is intrusted with certain general powers of supervision over the other attendants in his ward. He must have power also of apportioning to them their duties in matters not provided by the orders of superior officers. Suppose that the dusting and cleanliness of a portion of the ward is neglected, if he have not power to ascribe definitely to one of his subordinates the duty of keeping this portion of the ward clean, he cannot be held responsible for its condition.

What is true of the powers of officials is still more manifestly true of their obligations. They must be clearly defined. For instance, it is wrong to place a suicidal patient in a ward with a general warning only to all the attendants that he is suicidal. The obligation of watching him is not clearly enough defined. Each attendant may justly regard all the others as equally responsible with himself, and as equally charged with the duty of watching him. The homely adage that what is everybody's business is nobody's business will soon be exemplified; and in case any mishap occurs, it will be impossible to fix responsibility for it upon any individual.

Much of the efficiency of the administration of every institution depends upon the manner in which discipline is maintained. Indeed, when once a staff has been properly organised, the whole of the efficiency or non-efficiency of its working depends upon this. The following are the principles upon which disciplinary management should be conducted, all of which are included in the single principle of

TREATMENT ACCORDING TO DESERT.

Awards to Merit.—Merit should be recognised and suitably acknowledged. It is sometimes said that the mere performance of duty is not a matter that calls for reward or even acknowledgment, but that the observance of this virtue should be to each person its own reward. Whether this ought to be so in the case of perfect beings, I am not prepared to argue, but that, in the case of average human beings, the result of a due and suitable recognition, acknowledgment, and reward of the proper and meritorious performance of duty is infinitely superior to that of leaving merit to the complacent consciousness of its own worth, is a matter as to which no argument is needed. It has been settled by the common experience of mankind.

The acknowledgment of merit should be *suitable*—that is to say, the degree of acknowledgment should be in proportion to the merit exhibited. When a ward is found to be bright, clean, and in good order, the merit of the attendant in charge should be acknowledged by a word of commendation. When an official has been well conducted and efficient for a considerable time, his merit should be acknowledged by

increasing his pay and by offering him promotion when opportunity arises. When conspicuous presence of mind and resource have been exhibited on an emergency, the person so distinguishing himself should receive public acknowledgment. When a definite improvement in a patient's condition has been effected by the care and attention of an attendant, the attendant should receive special commendation for the achievement.

The suitability of the acknowledgment depends not only upon its due proportion to the merit displayed, but also on the time at, and the occasion on which, it is rendered. In giving praise for good works, more than in anything else, the saying is true that *bis dat qui cito dat*. The sooner the acknowledgment follows the desert, the more closely is the relation of cause and effect between them displayed, and the greater the satisfaction of the recipient. How completely the acknowledgment of merit may be nullified by delay can never be forgotten after the terrible reply of Dr. Johnson to Lord Chesterfield's tardy congratulations: "The notice," said he, "which your lordship has been pleased to take of my labour, had it been early had been kind; but it has been delayed till I am indifferent, and cannot enjoy it; till I am solitary, and cannot impart it; till I am known, and do not want it." When praise has to be given, let it be given at once. Too often, if the immediate opportunity is neglected, the matter is never attended to at all, and the deserving official is defrauded of his just rights.

Again, the suitability of the acknowledgment of merit depends greatly upon the occasion on which it is rendered. The more trivial the merit that has to be acknowledged, the more casual the acknowledgment may be; and the more conspicuous and important the merit, the more formal should become the acknowledgment. The occasion should vary according to the merit displayed, from a word of approval uttered in passing through a ward to the formal presentation of a testimonial in presence of the entire staff.

Awards to Faulty Conduct.—The second principle of management is that *faults should be observed and duly corrected*. Nothing is more important in the control and discipline of a staff than the immediate *detection* of faults. No consideration of severity of punishment contingent on the discovery of a fault is in any way comparable in deterrent effect with the certainty of speedy detection. It has been pointed out by Jeremy Bentham that thieving would instantly cease if the thief was certain that the property that he had stolen would be immediately taken from him and restored to its rightful owner; and it is a maxim in ethical practice that the true deterrent is not severity of punishment, but certainty of detection. Hence the necessity of a thorough supervision over all the asylum staff.

Next to the detection of a fault, it is of the greatest importance that it

be duly corrected. No slip, however trifling in its nature, should ever be passed over. The writer is no advocate of severity in punishment. The punishment should be proportioned to the fault. But it is most important that the commission of the fault should be recognised. In trifling matters, a word, a look even, is a sufficient recognition that a fault has been committed, and a sufficient punishment for its commission; but no fault should ever be permitted to pass by without some evidence that it has been recognised, and some warning that it must not be repeated.

Amount of Punishment not to depend on Indirect Consequences of Faults.—The due correction of a fault requires that the punishment allotted to the erring official shall be proportionate in severity to the gravity of the offence. This principle, and this alone, should regulate the severity of punishment. Very commonly the *consequences* of the fault are taken into consideration in allotting punishment; but this is a matter that ought not to be considered. For instance, one attendant leaves a door unlocked. No ill consequences result, and he is visited with a reprimand. Another attendant leaves the same door unlocked, and, in consequence, a patient escapes and commits suicide. The second attendant is dismissed from his post, prosecuted, and fined for neglect, and practically ruined. Now it is obviously most unjust that two men should receive punishments of such enormous disproportion for precisely the same offence. In each case the actual fault was the omission to lock the door, and although it would be just to make a difference between a fault committed from pure and gross negligence by an experienced attendant to whom the locking of doors has become an habitual and customary act, and the same fault committed from inexperience by a new and unaccustomed hand, it would be clearly unjust to make the severity of the punishment depend, as in the case instanced it would depend, upon the subsequent act of another person. It is quite true that the punishment of crimes by the law itself does proceed upon the principle that is here condemned. If a man shoot at another and kill him, the aggressor may be found guilty of murder and hanged. But if the effect of the shot is not fatal, although it was fully intended to be so, and failed from some wholly accidental circumstance out of the control of the aggressor, then the punishment of hanging cannot be inflicted. There is, however, no reason why a system of punishments newly constituted at the latter end of this nineteenth century should imitate the defects of a system derived from mediæval and barbarous ages; and, as already said, a difference in the consequences of a fault should not carry a difference in the punishment allotted. In the above case, if the omission to lock the door rendered the suicide of a patient probable, and if the omission was made with a knowledge of its wrongness and its

probable result, it should be punished neither less nor more severely than if the probable consequence had become an actual fact.

Punishment should be Prompt.—If promptitude is advisable in the recognition of merit, it is doubly advisable in the correction of faults. When a fault has been committed, there is very frequently an uncertainty and a conflict of evidence as to the circumstances under which the act was committed, and unless the matter is investigated at once, there is time for all kinds of errors to creep into the account of it that has to be accepted. When a crime is being investigated by a magistrate, and the prisoner “reserves his defence,” it is generally understood that the motive for the reservation is to gain time to concoct a plausible story; and the more closely investigation follows upon the heels of a fault, the more likely is it that the responsibility will be brought home to the several offenders in due proportion to their turpitude. Moreover, the more swiftly punishment follows upon detection, the greater is its effect. When a long space of time has intervened between the offence and the punishment, the gravity of the fault is forgotten, and the punishment appears unduly severe, if indeed the very lapse of time be not received by the general mind as evidence of condonation of the fault.

Punishment should fit the Crime.—The nature of the punishment should, where possible, bear such a relation to the nature of the fault as may make the one appear the natural and just consequence of the former. Thus, if an official exceed the time of his leave, his leave is curtailed on the next occasion on which it is due. If he is guilty of wasting food, the stores issued to him for his own consumption are diminished. If he wilfully or by negligence destroy the property of the asylum, he is fined a sum to pay for the damage. If he allow a patient to escape, he pays the expenses of the recapture. If his quarters are uncleanly or untidy, he is set the task of cleaning or tidying them during his hours of leisure. If he neglect to perform any duty, it is to be supposed that his neglect arose from forgetfulness; and in order to impress the duty on his memory, he should be set to perform it very frequently.

The *occasion* of a reproof or a punishment should always be a matter of consideration. A cardinal rule, which should never on any account be infringed, is that a superior official should never suffer reproof in the presence of an inferior. There is no more certain method of undermining the authority of officials and destroying the efficiency of discipline throughout the entire staff than by reproving officials in the presence of their inferiors, unless it be the contemptible practice of disparaging them to their inferiors in their absence. This last is a practice which ought not to need condemnation. It ought to be impossible. It is impossible to any man or woman who is fit to have the control of others. But it is not altogether unknown in lunatic asylums.

Open and flagrant faults, committed in public, and generally known to have been committed, should be openly and publicly reproved and punished. Less conspicuous faults may be punished in a less conspicuous manner.

Who should Punish.—When a fault of some subordinate official comes to the knowledge of his immediate superior, the latter will have to determine whether he shall deal with the offender himself, or whether he shall carry the matter to a higher authority. His decision must depend entirely on the gravity of the offence. If it is one which he has power himself to punish adequately, either by reprimand or otherwise, he need carry the matter no further. But if it be one which he cannot adequately punish, or if it be a repetition of an offence which his own punishment, previously inflicted, has been inadequate to prevent being repeated, then he would be taking upon himself a serious responsibility if he failed to report it to a superior authority. It will usually be proper, even if he do not officially report for punishment the fault of a subordinate, to mention the matter unofficially to his superior, so that the latter may be kept informed of the character of the agents who have ultimately to carry out his orders.

Reward and Punishment both Necessary.—It must be borne in mind that for the due and proper maintenance of the efficiency of a staff both the principles above enunciated must be conformed with. A system which depends upon reproof and punishment alone is foredoomed to failure. Reproof and punishment for faults must be combined with commendation and reward for merit; and the whole efficiency of the staff will depend upon the *justice* with which these four awards are severally distributed. They must be apportioned strictly and solely with regard to **desert**, and no other consideration must be allowed to weigh in their distribution. Anything like caprice, any flagrant disproportion between desert and award, whether from favouritism on the one hand or unfavourable bias on the other, any considerable variation from time to time in the severity with which faults are punished or in the manner in which merit is rewarded, will sap the confidence of the whole staff in the management, will lead to disheartening, demoralisation, and the perfunctory performance of duty.

SUPERVISION.

In order that praise and blame may be duly awarded, it is very necessary that the conduct of all the officials should be thoroughly well known, and it can be known only by an efficient system of supervision. Supervision is effected in two ways: first, by visits of inspection; and second, by reports and records by the persons supervised. Both methods are impor-

tant, and both should be utilised ; but the former is by very far the most efficient and important, and upon it the chief reliance should be placed.

Inspection.—Visits of inspection should be of two kinds. There is the formal visit at a fixed hour, known beforehand, when the whole of the work under the control of the inspectee is thoroughly overhauled and investigated ; and there is the surprise visit, made at frequent irregular intervals, without previous warning. At a surprise visit the inspectee is not taken from his work or disturbed in any way, the visit is made merely to see that he is attending to his duty, and as a check upon disorder and misconduct.

The formal visits should not be too frequent. Nothing is more harassing, nothing is a more fertile source of discontent than too frequent parades. When made, they should be thorough and searching, and the more thorough and searching they are, the less frequent need they be.

Surprise Visits.—On the other hand, surprise visits cannot be too frequent, nor can they be made at too irregular intervals. Their object is not so much to detect faults and ill practices as to prevent them, by impressing upon officials that they are never secure from a visit, that there is no moment in their hours of duty at which a visit may not be paid. It is usual for the superior officials to have their meals at fixed hours, and during these hours the subordinates consider themselves secure from the possibility of visits, and in consequence their conduct is apt to undergo relaxation at such times. It should therefore be made a practice by the superior officials at times to make their surprise visits at the hours usually devoted to their own meals. Again, it is customary for the inspectees to consider that they are secure from a visit of inspection immediately after such a visit has been paid ; it is well, therefore, for the inspector to make a frequent practice of making a second visit close on the heels of a previous one. In a lunatic asylum it is specially important for the security, comfort, and welfare of the patients that the attendants should be under a system of inspection which, by means of surprise visits, is rendered practically continuous.

The time at which supervision is apt to fail is at night, and the absence of inspection at night is supposed to be compensated for by the provision of tell-tale clocks. It is obvious, however, that all that can be recorded by the tell-tale clock is the bare fact that the supervised official was awake and active at the time the clock records. The clock cannot report what the official was doing in the intervals between the records ; and although it is probable, if the tell-tale record is complete, that the official was awake all through the night, yet there is no means of knowing how his time was occupied. In the case of an official on day duty, the mere report that he was awake all day would scarcely be thought sufficient record or proof of the performance of his duty, and the super-

vision of night attendants is not sufficient unless it is effected by the visits of a superior official as well as by the tell-tale clock.

Reports.—The second mode of supervision—that by records and reports—while it can never be sufficient without the visits of inspection, is a very valuable auxiliary to that method, and serves not only the purpose of supervision, but also those of conveying to the central authority important information, and at the same time of concentrating the attention of the reporter upon the points on which observation is most necessary.

The most important report is that of the charge attendant of each ward made at the end of every day. In this report is entered—

1. The name of any patient who has died during the day.
2. The names of those who have suffered injury or violence, together with the nature of the injury or violence.
3. The number of those who are taking medicine.
4. The names of those who have been secluded, with the number of hours that the seclusion lasted.
5. The names of those who have been mechanically restrained, with the duration and nature of the restraint.

The above-mentioned particulars are necessary for the entry of the particulars in the statutory books. In addition to them it is desirable that the attendant should report—

6. The name of every patient who has been admitted into the ward during the day.
7. The name and destination of every patient who has been discharged.
8. The names of patients who have had fits, and the number of fits.
9. The name of every patient with respect to whom a warning as to suicidal propensity has been issued.
10. The name of every patient who has been engaged in a struggle or has had a fall.
11. In addition, it is usual to report the patients who have been wet or dirty.
12. The number of patients who are usefully employed, the number who have attended any amusement or entertainment, the number who have attended Divine service, and the number who have been walking beyond the grounds should be stated, as well as the total number in the ward.
13. The charge attendant also reports, either in this report to the superintendent, or in a separate report to the steward, any repairs that have become necessary in the fittings of the ward—locks, valves, blinds, drains, closets, bathtubs, &c., out of order, windows broken, &c.

These reports occupy only a few minutes in writing, the forms being printed and issued to the charge attendants, and requiring merely to be filled in. When the attendant goes off duty, he hands the report to the head attendant, who makes a summary, omitting names of patients, and giving the numbers only of the patients under each of the above headings in each ward. He then adds each column, and the superintendent can then see at a glance the total number of patients in the asylum, male and female being differentiated, who are included under any one of the foregoing heads; and has, moreover, the materials for a complete investigation of any case or group of cases that appear to him to demand it.

CHARGE ATTENDANT'S REPORT SHEET.

Ward No.	Date																						
Names of patients admitted	Whence admitted																						
Names of patients died																							
Names of patients discharged	Whither discharged																						
Names of patients injured	Nature of injury																						
Names of patients secluded	Number of hours secluded																						
Names of patients mechanically restrained	What restraint, and how long																						
Names of patients under medical treatment.																							
Total number of epileptics																							
Names of patients who have had fits, and number of fits each																							
Names of patients proclaimed suicidal	Names of patients who have fallen, been struck, or engaged in struggles																						
Number of patients usefully employed	<table border="0"> <tr> <td rowspan="4">{</td> <td rowspan="4">In ward</td> <td>{</td> <td>House-work</td> </tr> <tr> <td></td> <td>Reading and writing</td> </tr> <tr> <td></td> <td>Needle-work</td> </tr> <tr> <td></td> <td>Fancy-work</td> </tr> <tr> <td></td> <td></td> <td>{</td> <td>Kitchen and laundry</td> </tr> <tr> <td></td> <td>In shops</td> <td></td> <td></td> </tr> <tr> <td></td> <td>On land</td> <td></td> <td></td> </tr> </table>	{	In ward	{	House-work		Reading and writing		Needle-work		Fancy-work			{	Kitchen and laundry		In shops				On land		
{	In ward			{	House-work																		
					Reading and writing																		
					Needle-work																		
			Fancy-work																				
		{	Kitchen and laundry																				
	In shops																						
	On land																						
„ „ attending amusements																							
„ „ walking beyond grounds																							
„ „ attending Divine service																							
Total number in ward this morning																							
Number admitted	Number discharged and died																						
Total number remaining in ward to-night																							

(Signed)

Charge' Attendant.

HEAD ATTENDANT'S REPORT SHEET.

No. of Ward.	Admitted.	Died.	Discharged or Removed.	Number Remaining in Ward.	Injured.	Secluded.	Restrained.	Epileptics.	Employed.	Attending Amusements.	Out Walking.	Attending Chapel.

The report of the night attendant is a simpler affair than that of the day attendant. The former reports—

1. The names of wakeful patients.
2. The hours of sleep and other particulars of patients under special supervision.
3. The names of patients who have fits, and the number of fits.
4. Any other circumstance worthy of record.

It is the practice in some asylums to record the number and even the names of patients who are wet or dirty, and this information also may usefully be reported.

The reports of the artisans should set forth the number and names of the patients working under their supervision, and anything worthy of report in the conduct or demeanour of the patients, the amount of work done during the day, and the amount and nature of material required.

The report of the engineer should set forth, in addition to the other particulars, the amount of gas, water, and coal consumed in each ward during the day, and the height of water in the well.

The workmistress's report is on the same lines as those of the artisans.

Where the steward is co-ordinate in authority with the superintendent, that portion only of the report of the artisans which refers to the patients will go to the latter, the report as to work, and the requisition as to materials, going to the steward, or, in the case of the workmistress, to the matron.

CHAPTER XXII.

THE CHAPLAIN.

THE chaplain to a lunatic asylum must not be a man of sombre religious views, nor must he be a fanatic, nor a man strongly imbued with the spirit of sacerdotalism. He should be a liberal-minded, sympathetic, cheerful person, of varied attainments; and it is advisable that he should

have some musical ability. He must not allow his ecclesiastical prejudices to prevent him from taking part in a game of cricket or lawn tennis, in a rubber of whist, or a dance. Such things, which to a person in the outside world are matters of recreation and of taste, become duties in a lunatic asylum; and a clergyman who would object to undertake them is not fitted for the post of chaplain to such an institution.

The relations of the chaplain to the other officers in the asylum are not very close, and do not demand much notice. It is of great importance that he should be, as he ought to be, a peacemaker, and not a tale-bearer, nor a tattler, nor a mischief-maker.

Besides his ecclesiastical functions, the chaplain is usually the librarian, and is expected to take a share in amusing and entertaining the patients.

For a congregation of insane persons, the performance of Divine service can scarcely be of too ornate a character. The chapel itself should be brightly decorated, and the introduction of music in the course of the service as frequent as possible. In all large asylums, and in most smaller ones, it will be found possible to bring together a sufficient number of persons from among the attendants, the officers, and their respective families, and the patients, to form an efficient choir, and the addition of the performance of a good choir to the services of the asylum chapel is a very great advantage. There should in every asylum be a person capable of forming and conducting a singing class, and in every asylum such a class should be constituted. There can be no more appropriate person to undertake this duty than the chaplain, and hence it is very advisable that he should be a person of some musical attainments.

The services in lunatic asylums should be brief, for the insane are not capable of keeping their attention fixed on any subject for long. The sermons should be short, and should be entirely divested of all terrifying vaticinations. The patients should be encouraged, cheered, comforted, and reassured. Any gloomy influence is likely to have a very serious effect on the mental health of some of them. The chaplain should not neglect to inculcate to the attendants, both in his sermons and by more private and individual influence, the great duty of humanity, patience, and tenderness towards the patients under their care.

THE LIBRARY.

In the constitution of the library the chaplain should be careful that there is no undue proportion of theological works, and that there is abundance of light and cheerful literature. The libraries of some asylums consist almost entirely of Bibles, prayer-books, and sermons. This is altogether wrong. The chaplain, who has many cheering influences in his life, probably does not himself confine his reading

entirely to works of this class, and he ought therefore to realise how greatly works of a lighter and more secular character are needed by those who live under the monotonous and dreary conditions of patients in lunatic asylums.

To keep the library well supplied, and gain additions to its numbers, is often a great difficulty; but it is a difficulty that may be overcome to a large extent by a chaplain who is gifted with the mendicant qualities which are of such service to many of his brethren of the cloth.

People resident in the district may be found willing to send to the asylum the wounded and maimed volumes of their own libraries, which can be cheaply re-covered in the asylum and added to its store. An occasional advertisement in the local paper will be productive in this way. Several families may be found who will supply to the asylum the weekly illustrated and other papers, and the monthly magazines after they have been done with,—say the week or month after publication,—and it will be easy for the chaplain to arrange with the superintendent to send an attendant with a patient or two on fixed days to call for these papers.

In the management of a library two books are required—a catalogue and a lending book.

To make a catalogue, a quantity of slips of paper are required, equal in number to the books in the library. The slips of paper are divided in two by a line or a crease, and on one side of this line is written the title of the book, on the other side the name of the author. When all the books have been thus treated, the slips are arranged with the titles in alphabetical order, and copied into the catalogue; sufficient blank spaces being left at the end of each letter to allow for future additions to the library. When this is done, the slips are rearranged, with the authors' names in alphabetical order, and a second catalogue is made in the same way.

The title catalogue should be numbered, the numerals beginning afresh with each letter, and in another column should be placed, opposite the title of the book, the number, in roman numerals, of the shelf on which the book stands. The number in the title catalogue and the number of the shelf should then be copied in the catalogue of authors' names.

The books must of course be numbered in accordance with the catalogue, the number being written on a label and affixed to the back of the book, and also written inside on the fly-leaf. The latter precaution should not be neglected, for patients are apt to pick off the number labels, and if stuck on with gum they will in time come off themselves. If stuck on with the following adhesive, they will not fall off, and will be removed with great difficulty.

Break $\frac{1}{2}$ oz. best glue into small pieces ; soak it for twenty-four hours in enough water to cover it. Soak $\frac{1}{2}$ oz. gum arabic for the same time in 3 oz. water. Mix the two, add a lump of sugar, and heat slowly, stirring all the time until it boils. The liquid should not be kept boiling, but the glue and gum should be completely dissolved.

The lending book should be arranged in five columns. The first contains the date of issue from the library, the second the number of the book in the catalogue and the letter or numeral indicating the shelf on which it is kept, the third the name of the person to whom lent, the fourth the ward in which the person resides, and the fifth the date of return. Blanks in the fifth column will of course indicate the books that have not been returned. A sixth column containing the name of the book is convenient, but not absolutely necessary. The librarian should attend to change the books not less often than once a week.

REPAIRING BOOKS.

Torn Pages.—Books on their return from the wards should be examined, and any necessary repairs made good. Torn pages may be mended by narrow strips of gummed tissue-paper fastened along the course of the tear, encroaching on the print as little as possible. Print is, however, visible through very thin tissue-paper, so that the repairs need not be limited to the blank portion of the page. An excellent material for these repairs is tracing-paper, or the paper used in the cyclostyle and similar copying apparatus. It is extremely tough, and very thin and transparent. The portion to be used is the margin.

Loose Pages.—When a book has a page or two loose, the loose pages may be fastened in with strips of similar paper an inch wide, half the width of the strip being gummed on to the back margin of the loose leaf, and the other half on to the same part of the adjoining leaf in the manner of a hinge. A similar strip on the opposite side of the loose leaf will make it secure. Strips of paper should be shut in the book, one on each side of the newly fastened leaf, to prevent the gum from sticking the pages together, in case any oozes from under the edges of the slips. When a whole section of the book is loose, it indicates that the band or the thread is broken, and in the former case the only remedy is to take the book to pieces and re-sew it ; but when the thread only is broken, the section may be sewn in again, somewhat clumsily, but still quite securely, in the following way.

Open the book in the middle of the loose section. If the thread is broken, you will see the free end. Now turn over the pages composing one half of the section, and draw the whole section gently forward out of the book. If the "band" is unbroken, you will see it in the form of a cord or a tape crossing the gap between the adjoining sections left by

drawing forward the loose section. Take a stout surgical needle the size of a large darning needle, and thread it with strong white thread, not cotton. Lay the book on the table with the back to your right hand, open it in the middle of the loose section, put the needle through the fold of the section, three-quarters of an inch from the lower margin. Thrust it in so as to make a hole through the several thicknesses of paper, and pull it out again. Now thrust it in again at a point a quarter of an inch nearer to the lower margin, and so far that the point comes out through the back of the cover. Close the book, leaving your left hand between the leaves holding the eye of the needle. Now with the right hand draw the needle sufficiently far through the cover to clear it from the leaves. Take care not to pull it quite through the cover, or you will have to begin again. Having drawn the needle about half an inch through the paper, thrust it back again, eye foremost, through the hole first made; loosen the thread, and pull the needle completely through. Now tie the end of the thread securely to this portion. Thrust the needle through the hole that is opposite the band, take care that it passes to the lower side of the band, thrust it partly through the back, and with the right hand pull it through the hole in the fold, and then thrust it eye foremost back through the same hole, but on the *upper* side of the band. Draw it completely through, pull it tight, carry it to the next hole, and repeat the process. Then take it to the third hole and attach the section in the same way to the third band. Lastly, fasten off with a knot similar to that with which you began.

Back Half Off.—Sometimes the back of a book breaks away from the boards, usually on one side only, by a tear running in the groove between the back and the boards. If only partially torn, the severance must be completed, and a strip of linen folded lengthwise, spread with the adhesive already described on the outside, and then attached, half to the inside of the disunited back and the other half to the back edges of the sections. The fold of the linen should be flush with the torn edge of the back. A similar piece is glued half on the outside of the back and half on the outside of the cover under the cloth.

Back Wholly Gone.—Supposing the back to be quite off, but the bands intact and the boards in place, the book must be re-backed. Separate the cloth from the boards on both covers of the book for an inch in width along the hinder margin. This may be done by steaming or by damping the cloth with warm water. If the back be not lost, it must now be glued to a strip of strong linen of its own length and of sufficient width to project three-quarters of an inch on each side of the back. Another similar piece of linen may be glued over the back, so that the latter is enclosed sandwich-wise between the two layers of linen, an aperture being cut in the upper layer to allow the title of the book to

be seen. The two wings of linen projecting on each edge of the back are now well soaked in glue, the back is placed in position, and the wings are inserted between the board and the loosened cloth cover of the book. The latter are then smoothed down into their original places and firmly pressed into position.

Covers Torn.—If the boards are broken away from the book, or if the bands are broken, there is no alternative but to re-sew the book, an operation which is not difficult, but which requires a little time and patience and a small amount of apparatus. In almost every asylum of considerable size will be found a patient whose trade is that of a book-binder, to whom this work can be intrusted; but if no such patient is available, the chaplain can soon learn to perform the operation himself, and thereafter teach it to a patient whom he can have allotted to him for an assistant. The method of procedure is as follows:—

Re-Sewing.—First completely remove the cover by cutting between the book and the boards any of the bands that are still unbroken. Take the naked book thus deprived of its cover and place it in the press, up to but not including the “groove,” the place where the boards are hinged to the book. Screw it up pretty tight, and with a sponge or brush and warm water remove the glue from the back, and leave it to dry; when dry, slip it completely into the press and screw it up tight to obliterate the groove. Leave it for some hours, then take it out of the press, cut all the threads in the middle of the sections and remove the bands, so that the whole book falls to pieces, each section separating from the rest. Now go carefully through the book and ascertain that all the pages are present. If there are any single leaves loose, they must be sewn to the adjoining leaf along the back edge, taking the thread over and over round the edge. The stitches should be about a quarter of an inch apart, and the needle should be inserted not more than one-sixteenth of an inch from the edge. If the folded edges of the leaves are torn, even if the leaves are not completely separated, they must be sewn in the same way.

Now put the book together; knock the head and back on the table so as to get the leaves all perfectly flush; put a board the size of the volume on each side, but not quite reaching to the edge at the back by about one-eighth of an inch. Put the book thus into the press, back upwards, and clear the saw cuts in which the bands were embedded, or, if necessitated by tearing off the folded edge, making new cuts with a tenon-saw as near to them as may be. Take great care not to make these cuts too deep. The lines for the cuts must be marked with a pencil and T square, so as to be exactly at right angles to the side of the book. They are five in number. The first is midway between the top and bottom of the book. The next two are midway between this cut and the top and

bottom of the book respectively, and the remaining two again divide the space between the last two and the top and bottom of the leaf. The three middle ones only contain bands; the two at the ends are for the insertion of the thread only.

For the next operation a sewing-press is required. This is a flat board with uprights fixed at two adjoining corners and connected by a cross-bar at the top. Exactly below the cross-bar is a slit in the board. Pieces of strong string or tape are tied loosely round the cross-bar and pass through the slit, on the other side of which they are secured by "keys"—small forked bits of metal. Now place a section of the book flat on the board with its back against the cords; screw the cords up moderately tight, and shift them along the cross-bar and along the slit until they correspond exactly with the three middle saw-cuts in the back of the book and are quite vertical. Then screw them up quite taut.

Place this press with the uprights towards you. Put the first section of the book on the board with the back or folded edge against the string, each string fitting into a saw-cut. Now with the right hand pass a threaded needle through the first saw-cut in the folded edge on the right—that is to say, the head of the book—and draw it through with the left hand, which is placed between the pages for the purpose. Take care that this left hand is between the middle leaves of the section, or two or more leaves will drop out when the sewing is completed. Draw the thread through to within about two inches of the end. Now, with the left hand pass the needle through the hole made by the saw on the *left* side of the band, and with the right pass it back on the *right* side of the same band, which the thread is thus made to encircle. Take the needle on to the next band and repeat the process, and so on until the third band has been encircled. The thread should be drawn tight round each band. Lastly, bring the needle out through the fifth hole nearest the foot of the page.

Now place another section on the first, and proceed in precisely the same manner, working from left to right instead of from right to left, finishing off by tying the thread to the end that was left hanging out at the first hole. Place another section on the second, and proceed as before, working back, of course, from right to left.

At each end of each section the thread is thrust between the two previously sewn sheets, and drawn round the thread which connects them. Care must be taken not to draw this portion of the thread too tight, or the book will be thinner at the ends than in the middle.

From time to time the sections are compacted together by hammering with a heavy stick.

When the sewing is finished, fasten off with a secure knot; put the book into the press with the back uppermost, and pull all the bands

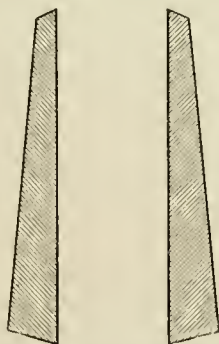
tight by taking an end of each in each hand. The greatest care must be taken not to pull one out, or the book will have to be sewn all over again.

To make a thoroughly workmanlike job, new "end papers" should now be added. This is the name given to the coloured paper which lines the inside of the boards, and forms the very first page of the covered book. Two pieces should be cut, each the exact length of the page, and twice the width. Each should be folded, with the coloured side inwards, in half, so that each one side of the fold is the exact size of the page. A narrow strip about a quarter of an inch wide, next the fold, on the plain outer side, is now pasted, and this side is laid on the outside of the book, so that it adheres by the pasted edge to the back edge of the inside of the book. One is thus fixed at each end of the book.

The ends of the bands are now unravelled and scraped with the back of a knife until they are wisps of tow.

Now put the book in the press again with the back uppermost, and rub the back well with thin hot glue; rub the glue well in, and wipe off the surplus.

About an hour afterwards, while the glue is still soft, but no longer sticky, take the book out of the press, lay it flat on the table with the fore-edge towards you and the back therefore away from you. Place the thumb of the left hand on the fore-edge, and the fingers on the upper side of the book pointing towards the back. Press the fingers down and draw them towards the thumb, at the same time striking the



back gently with a hammer or stick. Turn the book over and treat the other side in the same way. Continue this until the back of the book is sufficiently rounded. From one-third to one-fourth of a circle will be right.

The book is now to be placed between "backing boards," which are

boards of a slightly wedge-shape, and with a chamfered edge, as shown in section. The larger surface of the board is placed against the book, the thick edge to the back of the book, but not flush with it, a margin being left equal to the thickness of the millboard in the cover of the book. With the backing boards thus accurately placed on each side of the book, the whole is placed in the press and screwed up very tight. The back is then gently hammered, drawing the hammer towards the operator at each stroke, so as to bend the folded edges of the sections over the backing boards and to make a good "groove." In rebinding books which have already been once subjected to this operation, no difficulty will be found in effecting it.

Leave the book thus in the press for twenty-four hours, for the glue to get thoroughly dry.

Now take the cover of the book, and if it is entire, turn it inside out, lay one of the boards on the side of the book in its proper position, with the edge of the board in the groove, and mark with a pencil the exact position of the bands. Do the same with the other board. Opposite the points marked for the position of the bands, and at a half inch from the edge of the board bore a hole through it. Half an inch farther from the back-edge bore another hole. Take the ravelled ends of the bands, paste them, twist them to a point, pass these points through the holes in the boards, from within outwards through the first hole, and from without inwards through the second. Pull them tight, unravel the ends and spread them out, then hammer them flat. Now paste the remaining half of the end paper on the inner side of the board, and the book is complete. If the half inch of band that appears on the outside of the board between the holes is objected to, the book must be recovered with a new cloth, but for the wear and tear of asylums the processes that have been given will probably be considered enough.

To make bookbinder's paste, take $\frac{1}{2}$ quartern of flour, add water enough to cover it, and make a paste therewith, taking care to make it smooth and free from lumps; add 2 quarts water and 1 oz. powdered alum. Mix well, and boil till it becomes thick.

OTHER DUTIES.

The chaplain should often be in the wards, and should mingle freely with the patients. He will thus get to know them, and be able far more effectually to influence them. Moreover, he will be an additional check on the attendants, and it is certainly a part of his duty to notice whether the patients are kindly and humanely treated or the reverse, and to report anything noticeable to the superintendent. His chief duty in the wards will, of course, be to influence the patients for their good,

by conversing with them, by reading to them, and by leading their amusements.

It is difficult even for the officers of asylums to realise adequately the monotony and weariness of the lives of the patients. Any experience of the outside world, even at second hand, is an inexpressible gratification to them. The chaplain may therefore enable the patients to share to some extent in his own recreations by describing to them the scenes that he has witnessed during his visits to places of amusement, his annual holiday, and so forth.

Some asylums possess a printing-press. There should be one in all large establishments; and even if there be not, a copying machine, such as may now be obtained for a very small sum, will make a fairly efficient substitute. With either of these appliances, and with the aid of the other officers, and of the more intelligent inmates, a periodical publication may be issued, containing news of all subjects of asylum interest, both local and general, programmes and criticisms of amusements of all kinds, records of events, and very many other subjects. The gratification to attendants and others of seeing their names in print is very great and very harmless, and may be a substantial means of rendering them contented with their lot. Of such a publication the chaplain will naturally be the editor.

The chaplain may find much interest for the patients and some for himself by the formation of a museum of curiosities furnished by the patients. Patients in asylums often occupy their spare time in the construction of all kinds of queer objects of the most varied materials. Those of sufficient interest might be thus preserved, and to them might be added all things of interest collected about the estate or brought in by the patients from their walks. In this way I have been able to collect a considerable number of natural curiosities—fossils, vegetable monstrosities, flint implements, birds' nests, &c., which, if preserved and suitably described, and labelled with the name of the contributors, will afford gratification to him and arouse the emulation of others.

For illiterate patients the chaplain should hold afternoon or evening classes, and he should be ready to write letters for patients of this class to their friends.

The subject of after-care—the care of patients when discharged from the asylum—is one that may well engage the attention of the chaplain. Mr. Hawkins, the chaplain of Hanwell, has set a brilliant example of the good that may be done by a chaplain in this direction.

One of the greatest and commonest evils in lunatic asylums are the frequent changes of the attendants. This is an evil from which all asylums suffer, and which forms the constant theme of unfavourable comment by the Commissioners in Lunacy. One great cause of these

constant changes is no doubt the monotony and dreariness of the lives of the attendants; and this the chaplain can do much to obviate. He can hold classes for them in the winter evenings, can organise or take part in schemes for their occupation and amusement. He can be a constant influence for good in inculcating the great duties of tenderness and humanity towards the patients.

CHAPTER XXIII.

THE SUPERINTENDENT.

SUPREMACY.

It is a vexed question, and a question of great complexity and difficulty, whether the superintendent of an asylum should be, as the Act of Parliament provides and as the general custom allows, the chief medical officer of the asylum; or whether, as in the case in certain asylums, the chief medical officer should be restricted to purely medical duties, and the administration of the asylum in all matters not strictly medical should be placed in the hands of other officials, responsible, not to him, but directly to the committee.

On the one hand, it is alleged that when the lay administration is in the hands of the chief medical officer, and he is superintendent in fact as well as in name, his medical duties soon become swamped by his superintending duties; that he ceases to take any share, save of the merest routine character, in the treatment of the patients; that he neglects altogether the scientific investigation of insanity; that his time is entirely occupied in duties for which his previous professional training has not prepared him, and as to which he cannot, without years of practice, be anything but an amateur; that, in short, the duties for which he is fitted by education and training are neglected for duties for which he is unfit, and that, therefore, both sets of duties are inefficiently performed. Granted, say the advocates of this view, that a medical man, and especially the medical superintendent of a large institution, should be an accomplished sanitarian, and should be able to prescribe the remedies for defective drainage or ventilation; yet what can a man, whose education has been that of a physician, possibly know of the duties of various artisans or of the nature of the materials with which workmen have to deal? What does he know of the comparative merits of a stock-brick, a malm, and a grizzle? of the advantages of wrought-iron, or east-

iron or steel in this position or in that? of the difference between fir, pine, and spruce? of the size and make of boiler requisite for heating such a cubic space of wards and so many baths? of the number of pairs of boots that a competent tradesman should turn out in a week, and of the thousand and one points necessary for the effectual supervision of a staff of artisans and the correct estimation of the quantity and quality of their work? Is it not manifestly better, say they, that all technical matters outside his own immediate business should be removed from the superintendence of the medical officer, and that he should be freed from the burden of work of inferior character, and enabled to devote his whole time and attention to his proper duties—the care and treatment of the patients placed under his control?

On the other hand, it is said by the advocates of the system most prevalent, that there can be but one captain of a ship, and one person in supreme control of a large institution; that it is manifestly out of the question to expect a gentleman with the education, training, and qualifications of a physician to act in subordination to a house-steward, and that therefore the only alternative is to make the chief medical officer the superintendent; that the existence of several heads of departments, independent of each other, each responsible to the committee alone, leads to division and uncertainty of responsibility, to struggles for precedence and preponderance among them, to strife and ill-feeling, which spreads to their subordinates and causes a want of harmony, and therefore a deterioration of efficiency, throughout the institution. They say, moreover, that with respect to the stores, it is wrong in principle and disastrous in practice to withdraw from the medical officer the complete control of the food and clothing of the patients; that these matters constitute a part of the medical treatment, as to which he must be allowed perfect freedom to judge and provide what is best, and as to which he must be invested with full responsibility; that the employment of the patients under the supervision and instruction of the artisans is one of the most important means of treatment of insanity, and that if the medical officer is deprived of authority over the artisans, it becomes useless as well as dangerous to intrust the patients to their care, as has been found by experience in those very asylums to which the advocates of lay or non-medical superintendents point as examples of their system; that unless the medical officer have complete control of the staff, alterations in the construction or in the fittings of the asylum may be made which give facilities for suicide or homicide to the patients, or render their treatment unnecessarily difficult or hazardous; that if the attendants be responsible to one officer for the condition of their patients, and to another for the condition of their wards and ward furniture, there are certain to be conflicts of authority which will be

disastrous to discipline ; that artisans never render to a steward the same respect nor the same zealous service as to a medical superintendent, nor are they ever as well in hand when subject to a steward alone as when they are controlled by a medical superintendent, who is presumably of higher social and professional status. Finally, that the safety and treatment of the patients, for which the medical officer must always be primarily responsible, are bound up so intimately and in so many ways with every portion of the asylum and everything that is transacted within it, that it is impossible to deprive him of any authority within its precincts, without, at the same time, restricting his opportunities of doing them good or preserving them from harm.

To these arguments the advocates of lay superintendence reply, that there is no reason why there should be more friction between several heads of departments, all responsible to the committee, than between the same heads, minus one, all responsible to the medical superintendent ; that the nature of the food and clothing of the patients is determined by the committee on the advice of the medical officer, and that the whole function of the lay authority consists in supplying the materials thus determined on and ordered, and that if there is any failure in this respect it can be rectified by appeal to the committee ; that the alterations to the structure or fittings of the building can be made with the advice or on the approval of the medical superintendent, without making him responsible for their execution.

The advocates of this view do not, however, give full weight to the advantage of the immediate rectification of such a defect as, for instance, badly cooked food or rancid butter ; nor have they any answer to the reasons, which are certainly important, for investing the medical officer with the control of the artisans.

There are, it is obvious, great objections to both plans of management ; the question, which is the best ? does not admit of an immediate and decided answer, and the answer would probably not be the same in every case. In both plans the objections may be minimised, but cannot be wholly overcome. The objections to the medical officer being entrusted also with the superintendence would really not avail much, provided that the asylum were, in the first place, of moderate size, thoroughly well built, well fitted and equipped, and were not allowed to be extended. It is the constant extensions and alterations that every asylum undergoes which furnish the great objections to the function of medical officer being combined with that of superintendent. The mere maintenance without deterioration of the *status quo* of an efficiently systematised administration is not a matter to tax severely the time or the energies of a superintendent. It is the continually recurring alterations and the constant need of extensions, with the consequent dislocation of the ordi-

nary working processes, the extra strain on the staff, the reorganisation of the service, which occupy his time and attention and keep him from his medical duties. It is, therefore, much to be desired that every asylum should be designed and fitted for the full number of patients that it is to contain, and that enlargements of an existing asylum should not be permitted. It is not the mere building of the addition and laying out of its grounds, troublesome and absorbing as these are, that constitute the chief disadvantages of adding to asylums. When the addition is built, it is found that the old laundry, devised for a smaller number of patients, is insufficient, and all the patients, old and new, are deprived of part of their supply of clean linen. Then the boiler power is deficient, and the patients can be bathed only once a fortnight. Then it is found that the recreation hall is too small, and a proportion of patients is unable to take part in the entertainments. Then the chapel is not large enough to contain all who ought to attend service there; and so on throughout every department. The consequence is that for a certain, usually a considerable, time the patients have to put up with inferior arrangements, and then when the necessary extensions are at length taken in hand, the time and attention of the chief medical officer are again withdrawn from the patients for a considerable period while he is devising and superintending the erection of these new works. But for the absorption of his time and energies in these continual extensions and additions, the chief medical officer could, if properly seconded by experienced and trustworthy heads of departments, efficiently manage the affairs of a moderate-sized asylum without unduly encroaching on the time that he ought to give to the treatment of the patients and to the study of insanity.

There is another disadvantage attending the extension of the size of an asylum. It is unquestionable that the study of insanity is one of the most abstruse and difficult—perhaps the most abstruse and difficult subject that can occupy the mind of man. In consequence of this difficulty of the subject and of its unattractiveness to most practical minds, and in consequence of the want of stimulus that attends the isolation from fellow-workers in which most superintendents live, the tendency of a superintendent becomes year by year stronger, unless he has a special bent and taste for psychological studies, to neglect this portion of his duties and to devote himself more and more entirely to purely lay administration. When his time and energies are absorbed in the erection of some new *annexe* or department to the asylum, he has every excuse and great justification for allowing his medical duties to lapse; and when once they have been abandoned for any length of time, the chance of their being resumed *con amore* and with the enthusiasm that is necessary for success, is small indeed.

But if it be granted that an asylum is efficiently built and equipped, in the first place ; that the management is thoroughly well organised, and that extensions are forbidden ; then I think that, certainly in asylums of 1000 patients and under, and possibly in larger institutions, the best method of management will be to make the chief medical officer the supreme authority.

That a medical man cannot know all the details of the work of all his subordinates is true ; but so long as he has a thorough knowledge of the duties of those who have the immediate care of the patients, and is assisted by competent and loyal heads of departments, that is not essential. The commander of an army is not expected to know the details of the duties of all his subordinates. He must indeed have a thorough knowledge of the duties of all the combatants, of those who are brought into immediate contact with the enemy ; but he is not expected to have a mastery of the duties of the numerous artisans who accompany the army, nor an exhaustive knowledge of the materials they use. His ignorance of these matters, and the necessary absorption of his time and attention in the handling of the troops themselves, is not considered a sufficient reason for taking from him the supreme control of the army, and for giving to the various heads of departments—to the commander of the cavalry, to the chief of the engineers, to the quartermaster-general—an independent authority responsible separately and directly to the War Office.

When asylums attain enormous dimensions and contain 2000 patients and upwards, it is doubtful whether this reasoning any longer applies. In this case the duties inseparably attached to the care of the patients individually—the statutory duties alone, and the duties arising out of them—must absorb so much of the time of the superintendent, that it is scarcely possible that he will be able to perform them efficiently and yet have time to carry out with even approximate success the administrative duties, which are correspondingly increased in volume. In these cases, therefore, the separation of the duties becomes almost a matter of necessity, and the fact that it is so seems to be an additional argument against the construction of very large asylums.

CHARACTER.

Whatever the system upon which the asylum is administered, the superintendent must always be the most important officer therein, and the welfare of the patients and the success of the institution must depend more upon him than upon any other member of the staff. For this reason the choice of an appropriate person to fill this office is of the greatest importance.

The qualities required in an ideal superintendent are neither few nor common, and they are so diverse in their character as seldom to be combined in the same individual. That he should be a man of high attainments in his profession would appear to be a matter of course, were it not that committees so often appoint without any apparent reference to this matter. It would seem, from their practice, that it is necessary to point out once more that insanity is the highest and most difficult of all departments of medicine; that the study of insanity is by far the most abstruse and recondite study that can occupy the attention of the physician, and probably the most difficult to which the mind of man can be applied. To appoint to the control of a great asylum a man of insignificant professional attainments, is therefore an injustice to the patients who will be under his control, no matter how high may be his rank as an organiser and administrator. At the same time, to appoint a man solely on the strength of his ability in psychological research, and without reference to his administrative capacity, would be to court failure. The man to place at the head of an asylum is he who combines the two qualifications of high scientific attainments and high administrative capacity; and although the two qualities are not often found in high development in the same individual, yet the history of alienism shows, in the instances of a Conolly and a Crichton Browne, that they are to be obtained in combination, and that when combined they do in fact constitute, as might be expected, a superintendent of almost ideal perfection.

A superintendent should combine in happy proportions the two qualifications of intellect and character; and in this, as in other positions in life, character ranks first and intellect second.

He must be before all things a man of strong character, a man of dominant will, who can impose his will on others and compel their obedience by the sheer force of his own strong nature, and without need of formal insistence. He should be master, not only by mere position, but by right of a masterful nature. He should exercise a personal ascendancy, so that both staff and patients should feel that absolute unquestioning obedience is not only necessary and unavoidable, but is consistent with their highest self-respect.

But this is not all. He must not only be masterful, he must be sympathetic as well. He must secure an obedience that is not merely absolute, but is ungrudging, is willing, is even eager. He must inspire such confidence, both in the objects for which he strives and in his judgment as to the means by which they are to be attained, that his subordinates are heart and soul with him in his efforts. He must not only know exactly what he wants and see clearly how to get it, but he must gain such influence over his subordinates that they have confidence both in

the excellence of his aims and the adequacy of his means, so that they will strive heartily to forward his views, even though they may not know whither their efforts are tending.

Such influence, such ascendancy, are not to be attained by arrogant self-assertion, nor by pompous displays of authority. They are to be attained only by quiet strength of will and single-hearted earnestness of purpose. They are to be attained only by thoroughness of work, of observation, and of teaching. The superintendent must be master, not only of his subordinates, but of himself and his work. He must have an absolute mastery of every detail of his work, and must in case of need be able not only to tell his subordinates what is to be done, but to show them how to do it.

For his patients he should have a depth of sympathy and a breadth of charity such that he places, naturally, and without effort or self-consciousness, their interests, their comfort, their welfare in the foremost front of his endeavour; and, in his striving for these objects, should forget his own importance, and leave his personal dignity to take care of itself.

For the officers and staff he should have a care and consideration which should render their interests the matter next in importance to those of the patients. They should, under the system that he administers, receive a training that should render them capable of filling competently, not only the positions that they actually hold, but positions of greater responsibility and greater emolument, and when occasion arises he should do his best to obtain their advancement.

Such a man, so constituted and so actuated, could attain the utmost results that are capable of being attained in all the departments of his work—in the number of recoveries among the curable patients; in the amelioration of the condition of those who are incurable; in the degree of contentment and happiness of all who are under his care or are associated with him in his work; and last, but not least, in the amount and the quality of the scientific work that would be done in the asylum.

DUTIES.

As his title implies, the duties of the medical superintendent are both medical and superintending, and it is essential for the welfare of his patients that he should remember their dual nature. Too many heads of asylums are superintendents first, and relegate the medical portion of their duties to a secondary position, or leave them altogether to their subordinates.

The medical superintendent should remember that his first duty is the care and treatment of his patients. That is the object for which

the asylum is founded and maintained, and unless this object is continually kept before his mind, he will be sure sooner or later to fall into one of the many pitfalls that beset his path. Of these pitfalls the most important will be here pointed out, since it is much simpler and easier to keep in mind a prohibition than an injunction, and a warning of what is to be avoided is a fitting preliminary to an explanation of what is to be done.

The first pitfall has been already indicated. It is that of allowing the superintending portion of his duties to occupy a preponderant share of his time and attention, to the exclusion of his purely medical work. To men of practical mind, for whom psychological studies have little attraction, for whom the concrete details of administration, with their immediate and often showy results, have great fascination, the temptation will be great; and there are many circumstances which tend to increase it. It is much easier to bring before the notice of the Committee, and to gain credit for, good administrative work, than good medical work. The stimulus of having one's work recognised and appreciated is strong in the one case and weak in the other. Above all, the invaluable spur of frequent consultation and discussion, of the necessity of posting oneself up thoroughly in all recent knowledge and in all the particulars of a case, which is imposed upon the doctor who is brought into frequent contact with other practitioners or with students, is absent. It often happens, too, that a young superintendent, coming newly to an asylum, finds many arrangements different from, and it may be in some respects inferior to, those to which he is accustomed. Even if they be not actually inferior, they will seem so to him by reason of the conservative instinct in human nature, which makes an unfamiliar arrangement seem inferior to a familiar one. And he sets about with zeal and vigour to bring the establishment more into conformity with the arrangements which seem to him more fitting. He begins, naturally and properly, with those arrangements which are most obviously defective, and the evident benefit that results from his alterations encourages him to further efforts. He initiates further changes, and again further changes. But each change that he effects, supposing him to take them in the right order—the order of their urgency—is less obviously necessary than the previous change, and at length he finds himself, or he is found by others, to be entering upon reforms of doubtful utility, and it may be that a severe check for the perpetration of some blunder is the first thing that rouses him to the consciousness that he has developed a passion for change for the sake of change; that he has come to love the sense of power that he feels in witnessing bodies of men obedient to his will; that he receives a certain titillation to his vanity from being able to present a smarter

appearance than his predecessor, or than other superintendents ; that he is infected by the brick-and-mortar fever, which does not with him, as with others, carry its own antidote with it, for he can indulge his propensity at other people's expense. He comes to forget that new buildings and smart uniforms are no criterion of skilful medical treatment, and that at the neighbouring asylums, where the attendants are perhaps less tastefully attired, and where perhaps there is not a telephone nor an electric tell-tale on the premises, the patients may yet be more assiduously cared for, their lives happier, and their prospect of recovery better. From this error he would have been saved had he borne in mind the primary fundamental canon, that the care and treatment of the patients is his first duty.

The second pitfall is on the other side of his path, or, more correctly, at the other end. After years of such endeavour as is above described, a medical superintendent may, as he approaches his grand climacteric, settle contentedly down into the conviction that the asylum over which he presides is in all respects perfect ; may sink into a mechanical routine, and from sheer lack of energy and enterprise may cling to methods that have become antiquated or even obsolete ; may fall behind the times, and thus tolerate the slow growth of abuses, whose seeds, like those of weeds in a garden, are always present, and need no cultivation but lack of continuous attention to make them germinate and flourish.

The third pitfall is one which few medical superintendents seem able entirely to avoid. Most of them have slipped one foot at least into it. It is that of regarding themselves and their post in a reversed aspect, and tacitly assuming that the asylum is founded and maintained for the benefit, not of the patients, but of the medical superintendent. Doubtless, if the question were put to them thus in plain terms, they would be startled into an admission that after all the care of the patients is the prime object of the institution, but this verbal confession is contradicted by the general tone of their speech and conduct.

That a medical superintendent should speak of the inmates of the asylum as "my" patients is only in accordance with professional usage, and cannot be objected to. When he speaks of "my" assistant medical officer, he is within the fortress of grammatical defence. But when he speaks, as many medical superintendents do speak, of "my" attendants, "my" wards, "my" asylum, he is assuming an unwarrantable position, and is adopting an attitude which has a bad effect on the tone of his subordinates, and a worse effect on himself. The effect on his subordinates is bad, because his tone lowers him in their opinion. What possible respect can they have for a superior who is constantly arrogating to himself a position that they well know does not belong to

him? Behind his back they laugh at his pretension; and in ridiculing his assumption of qualities which do not belong to him, they do not stop to discriminate, but disparage also others which he does possess. To such lengths does this regrettable tendency carry some heads of asylums. that one may be heard to warn his patients not to damage "my" furniture, and another will order them to get off "my" grass. They really might almost as well order them to get out of "my" sunshine, and not to breathe "my" air.

It is not only in speech that this unfortunate tendency shows itself in some medical superintendents. Where it exists it is apt to colour the whole of their demeanour and conduct; the entire comfort and welfare of the hundreds of patients come at last to be postponed to the convenience, or it may be the exaltation, of the medical superintendent. A gate which affords them a convenient short cut to or from their work is walled up lest he or his guests should catch sight of them going and returning. Some hundreds of patients have to sit in the ball-room in idleness and *ennui* until it suits him to leave his dinner and give the word for the dance to begin. The cricket-matches cannot begin yet, because the field is wanted for his cows. The chaplain must not begin the service until the medical superintendent's wife is in her pew. A broken window at the head of a patient's bed needs repairing; it must wait until the medical superintendent's greenhouse is mended.

It will be said that this picture is a caricature, but the instances above given are not fancy pictures, and those who are acquainted with many asylums will know of one or two in which such events have been possible. On the other hand, let me hasten to state that there are asylums in which the medical superintendent is the friend and benefactor of all; in which he is really beloved by both patients and staff; in which the faces that meet him are not servile nor obsequious, and the faces that he has passed express neither contempt nor derision. But there are, or have been, asylums in which no man or woman of honest independent character could wish to remain long.

The last pitfall that a medical superintendent needs to be warned against is that of jealousy of his assistants. Living, as he usually does, far in the country, separated from the centres of learning, with his time largely occupied with administrative business and lay affairs, it is inevitable that he should fall behind in his knowledge of the most recent discoveries in the world of medical science. A new assistant is appointed, fresh from the schools, fresh from taking his degree, primed to the lips with academical knowledge. And the medical superintendent, whose medical knowledge, even of his own student days, has grown somewhat rusty, feels keenly his inferiority in this domain; and, lest his subordinate should "score" over him, he abstains from

discussing medical topics at all, and declines to meet his assistants at the bedside of his patients. Too often he does not content himself with even this negative line of conduct; but, while avoiding consultation over the cases of his patients, he will alter the treatment that his subordinate has ordered, without even the courtesy of a notice to or a consultation with him.

It is needless to say that not only the conduct, but the attitude of mind that prompts it, is altogether wrong. It is no disgrace to a man who has left his medical school twenty years before, and who since that has had little opportunity and less inducement to keep his knowledge abreast of the time—it is no disgrace to such a man to be ignorant of many things that are at the fingers' ends of the younger man who is fresh from his school and his examinations. But to refuse to join in consultation with his younger colleague, for fear that his own deficiency of recent knowledge should become apparent—that is disgraceful. His refusal does not hide his deficiency; it makes it yet more apparent; and it is a grave breach of duty, inasmuch as it deprives the patient of the benefit of a combination of opinion, in which the recent knowledge and exact methods of the younger consultant are placed at the service of the ripe experience of the older man. Why should that be avoided in asylum practice which is of daily occurrence in practice outside? When a general practitioner feels that he is becoming antiquated in his methods, he hastens to take a young and able man as his assistant or partner, in order that he may put himself up in more recent knowledge: and that is the course that should be taken in asylums. Superior as the younger man may be in recent methods, he has more to learn from the experience of his senior than the latter has from him, and the course that is here condemned is an equal injustice to both. Let not a superintendent imagine that by refusing to consult with his assistant he is concealing his own want of knowledge. He is making it more conspicuous. Attendants—yes, and the very lunatics themselves—are quick to note such a sign of weakness, to comment on it, and to ridicule it amongst themselves.

Such being the pitfalls that the medical superintendent has to avoid, let us now describe the positive duties that he has to perform. These may be grouped under the following heads: Medical; Statutory; Administrative; Miscellaneous.

MEDICAL DUTIES.

As already laid down, the first and principal duty of the medical superintendent is his medical duty—is the care and treatment of the patients who are committed to his charge. If this point is insisted on

with undue urgency and reiteration, it is because there is so much danger of its being forgotten. The medical superintendent has so many other duties, which are so much more interesting, and yield so much more rapid and striking results, that the temptation is great—is indeed too often found irresistible—to devote the greater part of his attention to these latter duties, and to relinquish his purely medical functions largely or wholly to his assistants. So far has this tendency gone in some cases that I have known a medical superintendent, upon his attention being called to a patient who suffered from bodily illness, ask in an astonished and injured voice if the assistant medical officer was not at home! At the risk of being tedious it is therefore necessary to insist again and again that the superintendent of a lunatic asylum is a *medical* superintendent. He is appointed primarily to care for and to treat the patients; and whatever other duties may be imposed on him are intended to be, and ought to be, subsidiary to his first and greatest duty. They were originally imposed upon him only in order that his discretion should be free and unfettered in the treatment of his patients. So that he might not be hampered in any way in his regulation of the lives of his patients, power was given him to direct the entire asylum; and if he makes that an end in itself which was intended only as a means to a greater end; if he occupies himself solely in the direction of the asylum, and delegates to others the treatment of the patients, for the better performance of which the direction of the asylum was entrusted to his hands, he gravely misconceives the nature of his duties. If he does this, he lowers himself from the position of a professional man to that of a house-steward; and sooner or later committees will realise that the position of a non-medical superintendent can be filled better, as well as far more cheaply, by a man who has received a thorough training as house-steward, than by one who has been trained to a totally different business, and who, as a house-steward alone, is for a long while but an amateur.

The first duty of a medical superintendent, then, is to treat his patients; and at once a division of his duties becomes manifest. He has to treat their bodily ailments and their mental malady. This is not the place to enter in detail upon either subject, neither being comprised in asylum management; but certain aspects of them may fairly be included under that heading.

The usual custom in asylums is for each assistant medical officer to have certain wards allotted to him, and to have the care of those patients only that are in his allotted wards. Every patient in the asylum is thus under the care of one or other assistant medical officer, while the medical superintendent exercises a general supervision over the whole, going round the whole asylum daily if it is a small one, or taking two or

more days for his inspection if it be of great size. Such is the usual arrangement, and, as described, it appears to be perfect. Unhappily, however, it is, as ordinarily practised, vitiated by a great and radical defect, viz., that the medical superintendent and the assistant medical officer do not visit the wards together. This statement will seem incredible to a hospital physician, but it is in asylums the almost universal rule. In his medical capacity the assistant medical officer stands to the medical superintendent in somewhat the same relation that in hospitals the house physician stands to the visiting physician. The subordinate in each case visits the wards twice daily and makes his reports to his superior, who visits at longer intervals. In a hospital the two invariably visit the patients together. In an asylum they never do so. To any one who is familiar with medical practice it would seem superfluous to argue the advantages of the former course ; but seeing that the practice in asylums is almost universally the latter, it becomes necessary to give reasons why this course is faulty.

In the first place, the patient never gets the benefit of a proper consultation. There can be no common basis for a consultation unless the consultants are agreed about the facts, and unless they see the patient together it is extremely unlikely that both will have observed the same facts ; or, if they have, that both will be similarly impressed by the facts. When both see the patient together, the attention of each can be drawn by the other to any fact that is regarded as significant, and its existence and significance then and there debated.

In the second place, the patient is unnecessarily disturbed by two visits when one would have sufficed ; or if, as often happens, the visits closely follow one another, he who comes second is unwilling to put the patient to the trouble and fatigue of a second examination, which is therefore not made, and this visitor remains ignorant of the patient's condition.

In the third place, this system of separate visiting gives rise to continual friction between the medical superintendent and his assistants. It continually happens that the treatment ordered by the one is altered by the other, and the consequences of this dual control are as disastrous to the discipline of the institution as they are to the welfare of the patient. When the treatment of one medical officer is altered by another, the former is regarded by attendants and patients as having been snubbed. The news spreads through the institution like wildfire, with results to discipline and good feeling that may be imagined.

For every reason—for the sake of his patient's welfare, for the sake of the discipline of the institution, and for the sake of his own dignity and *amour propre*—the medical superintendent should make it an invariable rule to be accompanied by his assistant medical officer in

every medical visit that he makes to the wards. Only by so doing can he do justice to his patients and maintain his own position.

Where there are more assistants than one, it is advisable that any case of exceptional difficulty or interest should be visited by the whole of the medical staff together, and a good plan is to set aside one day of the week for visits of this nature. Besides the advantage thus accruing to the individual patients to whom these visits are paid, many indirect advantages will be gained, not only for the patients, but for the medical superintendent, for his assistants, and for the asylum at large. By these periodical consultations the medical knowledge of all who take part in them will be advanced and will be kept in progress. It is by such meetings by the bedside that the knowledge and skill of all high-class clinicians have been gained and maintained; it is by this contact of mind with mind that the intellect is prevented from rusting; and were this system maintained, as it should be, in every asylum, we should never have heard the complaints that have of late become so loud and so urgent, that the scientific study of insanity is in lunatic asylums almost unknown. By this system a keen interest in medical affairs would be maintained, not only among the medical officers themselves, but throughout the whole asylum. The formal visit of the entire medical staff to any patient would be a guarantee to every patient in the asylum that his or her own case would receive sufficient attention at the hands of the authorities. It would impress upon the attendants the high importance of the medical aspect of their duties. It would proclaim in unmistakable tones, throughout the whole of the little world of the asylum, that the care and treatment of the patients was to be kept prominently in view as the object and reason of its existence.

Another important medical duty of the superintendent, which falls to be considered here, is the classification of the patients, or the allocation of each patient to the ward in which he is to live. This is a matter of the greatest importance, for upon it depends to a large extent, not only the comfort of the patient, but also his chance of recovery or of improvement; it is also a matter often of the greatest difficulty, because, on the one hand, the factors that have to be considered are numerous, and, on the other, the opportunities for classification are necessarily limited by the number of separate wards in the asylum, and their proportion to the number of patients. It is scarcely necessary to say that the classification of *insane patients* for clinical purposes is a vastly different matter from the classification of *insanities*, or of the forms of insanity that insane persons may present. The latter has been dealt with by the writer in a previous work, and is not now in question.

Putting on one side all idea of scientific divisions and nomenclature,

and looking to the practical and clinical side alone of the matter, the attributes which have to be considered in classifying patients in asylums are the following, and it will be seen at once that they comprise all the elements necessary for a perplexing cross-classification :—

1. The date of the patient's admission.
2. The duration of his malady.
3. The existence and nature of bodily disease.
4. A tendency to suicide.
5. A tendency to violence.
6. Feebleness or vigour.
7. Noisiness.
8. Industry or the reverse, and occupation.
9. Offensiveness of habits.
10. Sexual tendency.
11. The amount of liberty that can be allowed.

1. Recently admitted cases necessarily require more attention than the majority of other patients. Their habits, tendencies, possibilities, have yet to be learnt. Some cases, of patients who are manifestly chronic demented, and who have been transferred from some other care, will need less attention than the remainder of new admissions ; but all patients who are admitted on an original order will require a certain period of probationary observation of a more than average intelligence before being allocated to a more permanent position. Hence all recent admissions should be in the first place warded under a thoroughly experienced attendant of known capacity, who has not so many cases under his care that he cannot devote special attention to the new comer. The ward to which recently admitted patients are sent should not contain a large number of patients, so that the new comer may be spared the shock of being at once brought into contact with a large number of insane persons, of more or less repulsive or terrifying habits.

2. Cases of recent origin afford, as is well known, a much more favourable opportunity for successful treatment than those of long duration ; hence cases of the former class should be so circumstanced that the maximum of care, attention, and individual study can be devoted to them. The wards to which they are sent should therefore be towards the centre, and not on the outskirts of the asylum, so that frequent visits by the medical officers are facilitated. They should be in wards in which the staff of attendants is ample, so that abundant attention can be paid to them.

3. The existence and nature of bodily disease in the patient forms a very important element in determining how he is to be warded.

Epileptic patients are usually warded together, for it is necessary that all should share in the advantage of sleeping under observation at

night, and it is inconvenient for patients to live in the daytime in, and be allocated to, other wards than those in which they sleep.

General paralytics also require supervision at night, since they also are liable to epilepsy, but on account of their restless and dirty habits they need, when in advanced stages, to be placed in single rooms at night; and in the daytime their feebleness, the ease with which they can be thrown down and injured, and their meddling and interfering habits, which often provoke aggression, render them undesirable companions for the mere epileptics, who are as a rule a sturdy and irascible folk. For these reasons general paralytics are best warded among the quieter and feebler patients, and in a ward to which an observation dormitory, with single rooms round it, is attached. In the later stages they will go to the infirmary.

Those patients who have any incapacitating bodily illness which requires them to be kept in bed will, of course, be sent to the infirmary.

Patients with infectious or contagious bodily maladies will be sent to the detached hospital set apart for cases of this description.

4. Suicidal patients also require special supervision at night, but it is for obvious reasons undesirable that they should occupy the same dormitory as the epileptics, where they will be witnesses of many terrifying sights and sounds, which will not tend to diminish their mental depression. They should sleep in an observation dormitory by themselves, and in the single rooms round this dormitory may be placed the general paralytics, whose geniality, joyousness, high spirits, and activity will have the effect rather of a stimulus and good example than of a depressant to the melancholics, from whom, also, violence is not often to be apprehended.

5. Patients with a tendency to violence are usually warded together in what is commonly called a "refractory ward," an unfortunate title, as it conveys the impression that violent patients are evil-disposed, and are to be dealt with by repressive measures. The wisdom of thus collecting together large numbers of turbulent patients appears at first sight doubtful. The accumulation of explosive matter into larger masses does not usually tend to diminish the force of the explosion when one does occur, and the daily and hourly contact of violent patients with each other would seem to be a means of ensuring frequent scenes of violence. As a matter of experience it is found, however, that the arrangement works well. The known aggressive tendencies of the others imposes on each patient a certain necessity of restraining his own aggression. If he gives way to his own impulse, he knows that he will provoke an instant retaliation, which may easily be worse than the attack; and the knowledge of this possibility holds him in check.

On the other hand, the alternative of distributing those patients who have tendencies to violence among the patients of harmless and in-offensive habits, is apt to have just the opposite effect. Seeing that they can be violent with impunity, they are violent to excess; and their victims are just those patients who are least able not only to withstand them, but to bear without danger their attacks. The balance of convenience seems therefore to be in favour of warding the violent patients together.

6. The feebleness of a patient is manifestly a reason for separating him from those who are aggressive, but it does not follow that a ward should be populated entirely by patients of feeble bodily vigour. Such a practice is inconvenient from an administrative point of view, for it leaves no patients in the ward to whom the rougher work of scrubbing and cleaning can be committed. Feeble and vigorous patients should therefore be warded together, but not the feeble and the turbulent.

7. Patients who are noisy should be as far as possible separated from the rest, so that the annoyance they occasion may be minimised. Especially should those patients be separated from the rest of the institution who are noisy at night. At the critical turning-point of a recent case, the question whether a patient is to recover and be restored to society, or whether he is to remain for life a hopeless dement, may be determined by the absence or presence in a neighbouring room of a hammering, raving maniac. The great bulk of the patients, for whom no such momentous question has to be decided, cannot be expected to be, and will not be, as well-mannered, as tranquil, as free from excitement, or as industrious, if they are irritated and exasperated by enforced wakefulness due to this cause. Lastly, it is nothing short of cruelty to subject attendants, whose work is so responsible, and requires such unceasing vigilance, to the rack of one sleepless night after another. The disturbance of scores or hundreds of quiet people by a single noisy maniac ought never to be tolerated. Small blocks for the accommodation of noisy patients at night ought to be built at a distance from the general wards, and from the sleeping quarters of both patients and staff, and to these blocks the noisy patients should be remitted.

8. The habits of the patients as to industry or the reverse, and the occupation that they are able to follow, will in some cases determine the position to which they shall be assigned. A female patient skilled in laundry-work, and willing and able and fit to work in the laundry, will naturally be warded in that department. Male patients who are capable of working at the trades of the several artisans will be warded in the wards adjoining the artisans' shops; and so forth.

9. Patients of offensive habits will be assigned to single rooms for their sleeping accommodation, and will in the daytime be placed where

there are fewest sensible patients to be annoyed by their disgusting peculiarities.

10. Patients in whom the sexual craving is exaggerated will not be placed in a position in which they come into association with persons of the opposite sex.

11. Patients to whom a more than usual amount of liberty can be allowed will naturally be warded together in a ward the doors of which are during certain hours left open.

Taking into consideration all the elements enumerated above, it will be seen that on each side of an asylum there should be the following separate departments:

1. Small wards for recent cases and new admissions.
2. A ward for epileptics.
3. A ward for suicides, general paralytics and others.
Each of the above should have an observation dormitory.
4. An infirmary.
5. A ward for turbulent patients mainly.
6. A ward for chronic demented and feeble patients mainly.
7. A ward for the industrious and for convalescents, to whom extra liberty can be allowed.
8. A block for patients who are noisy at night.
9. A detached hospital for cases of infectious and contagious disease.

The only other purely medical duty of the medical superintendent that need be here insisted on is that of making post-mortem examinations. In some asylums very little attention is paid to this matter, and very few such examinations are made. Others are much better in this respect, and are favourably mentioned by the Commissioners in Lunacy for the regularity with which post-mortem examinations are conducted. But even in the latter case these examinations are conducted almost entirely by the assistant medical officers, the medical superintendent rarely assisting at them, unless in special cases, as, for instance, when an inquest is pending. To the medical mind it is superfluous to insist on the importance of post-mortem examination. It is only to such superintendents as are ceasing to be medical that the subject is here insisted upon. Without the verification that such examinations afford, it is most difficult to keep up year after year that keen interest in medical work which it is so essential to maintain; and apart from this aspect of the question, the discoveries, which are made from time to time on the post-mortem tables, of fractured bones and other injuries which were unsuspected during life, render evident the extreme desirability of such an examination being made by the medical superintendent in every case in which it can possibly be done.

The keeping of the case-books is in part a legal duty, but since it is chiefly a medical duty it may be dealt with here. As a rule, case-books

in asylums are very perfunctorily kept, though to this rule there are many shining exceptions. The medical superintendent very rarely interests himself in the case-books. In some small asylums he writes the headings, and makes the first notes on the patients on admission; but in most asylums the superintendent seldom or never sees the case-books. It is, however, his duty to see that they are properly kept, and he should inspect them from time to time for the purpose. On his daily visit to the wards he should suggest to the medical assistant any fact that he may particularly wish to be noted, and the medical assistant will record it in his note-book, to be transferred to the case-book at leisure. The more the medical superintendent interests himself in medical work, the more thorough the treatment of the patients will be.

CHAPTER XXIV.

STATUTORY DUTIES.

THE following chapter applies to those institutions only which are subject to the law of England.

Strictly speaking, the whole of the duties of the superintendent of an asylum or hospital are statutory, and the whole of the duties of the superintendent of a licensed house may be so. For in the former two cases the duties are prescribed either by the Act itself or by the rules of the Commissioners, which have the force of an Act, or by the rules of the visitors, which are ordered by the Act to be observed; and in the latter case the Commissioners may, if they think fit, make rules, and such rules are ordered by the Act to be observed.

Those duties only are here described as statutory which are prescribed in the Act itself, or in the rules issued by the Commissioners in Lunacy in conformity with the Act.

The statutory duties of medical superintendents fall naturally into the following categories:—

1. Those attending the reception of patients.
2. Those necessary for the retention of patients.
3. Those attending the recovery of patients.
4. Those attending the discharge and removal of patients.
5. Those attending the death of patients.
6. Those attending the escape and recapture of patients.
7. Those attending the use of mechanical restraint.
8. That of transmitting certain notices and reports.
9. That of posting certain notices in the institution.

10. Those in connection with the correspondence of patients.
11. That of admitting certain persons to visit patients.
12. That of obtaining the consent of authorities in certain cases.
13. That of keeping certain books.

I. DUTIES ATTENDING THE RECEPTION OF PATIENTS.

When a patient is brought to an institution for admission, it is the duty of the superintendent to satisfy himself that the documents that are presented with the patient are sufficient to authorise his reception. These documents differ greatly in number and form in different cases, and it is very necessary that the superintendent should be familiar with the requirements of each case in order that he may be able to satisfy himself whether or no the requirements are fulfilled, and so that he may receive or refuse to receive the patient accordingly.

The documents differ according to whether the candidate for admission is a private, a pauper, or a criminal patient; according to whether he is to be now-detained for the first time or is removed from other care; according to the institution to which, and the place from which, he comes.

Original Reception.

I. PRIVATE PATIENT.

The authorisation for the admission of a private patient who does not come from another institution or from single care may be in one of four forms.

It may be either—

1. A judicial reception order on petition, or
2. An urgency order, or
3. A summary reception order, or
4. An order by the committee of the person.

(1.) Reception on Judicial Order on Petition.

In the first case, of a reception order by a judicial authority on petition, the authority for the reception and detention of the patient is the order; and if the order be in proper form and be valid on the face of it, and if it be accompanied by the other documents, viz., the petition, statement, and medical certificates (*which also are in proper form and valid on their face*), then the superintendent may lawfully receive the patient even though there are material errors in the documents sufficient to render some or all of them invalid.

The requirement which is in italics is not in the Act, neither is it in the

Rules of the Commissioners. It is, therefore, not strictly speaking a statutory requirement; and in strict law a superintendent is not bound to see that it is observed. The authority for admitting the patient is the order, and so long as the order is in form he is under no legal obligation to satisfy himself as to the validity of the accompanying documents. The Act provides that unless certain regulations as to these documents are observed, *no order shall be made*; but if, in spite of this enactment, a judicial authority takes upon himself to make the order, the superintendent may lawfully act upon it, and is under no legal compulsion to go behind it to see if the documents on which it is founded are in proper form.

Although, however, there is nothing either in the Act or in the Rules of the Commissioners to require a superintendent to satisfy himself as to the proper form of the documents accompanying the order, yet in a *circular* issued by them, and dated April 16, 1890, the Commissioners state that "the person receiving the patient must see that all the requirements respecting reception orders *and certificates* (no italics in original), as specified in sections 28 to 33, both inclusive, appear on the face of the documents to have been complied with." It is evident, therefore, that the Commissioners expect the superintendent to examine the certificates, and, since it is always open to a superintendent to refuse to admit a *private* patient, the order merely authorising, and not requiring him to admit, it is to be presumed that, in the case of a patient being presented for reception with an order which, owing to some invalidating defect on the face of the certificates, ought not to have been made, the Commissioners will expect the superintendent to refuse admission to the patient.

There is no requirement in the circular, any more than in the Act, or in the rules under the Act, for the superintendent to have regard to the petition or the statement. He may therefore, no doubt, admit the patient even though these documents, or either of them, exhibit some material and obvious defect. He may not, however, admit a patient if either the petition or the statement is *altogether wanting*, for he is under statutory obligation to send copies of these documents to the Commissioners in Lunacy within one clear day of the patient's admission.

The Order. To put the order in proper form, all the blanks in Form 3, Schedule II. of the Act must be filled in, all the superfluous words deleted, and no words must be deleted that are not superfluous.

An order may, however, be sufficient to authorise the detention of a patient until it can be amended, even though all these requirements are not complied with, provided that it contain no damning or fundamental defect. The fundamental or vitiating defects in an order, any

one of which must prevent the superintendent from even receiving the patient, may be in one of four places—

a. In the designation of the patient. If the name be omitted after the words “authorise you to receive the said ——” the patient cannot be received, for the order is not complete. There is virtually no order. The same is the case, of course, if the wrong name, that of the petitioner for instance, be from inadvertence inserted here. But if the name be merely misspelt, or if one or more of the Christian names be omitted, the order is good. What is required is that the patient shall be sufficiently designated to identify him.

b. In the date. If the date be more than seven clear days before the patient is brought for admission, he cannot be admitted. So if the date be omitted the order is of no effect, for the lunatic must be received within seven clear days of “its date.”

c. In the signature. If the signature is omitted there is no order. Neither does the order authorise the detention of the patient if it be signed by a relative of the petitioner, or of the husband or wife of the patient. Such persons are incapable of making an order.

d. In the designation of the superintendent. An order directed to the superintendent of another asylum or institution, in the same or another county, would not authorise a superintendent to receive a patient. If the superintendent is not designated, the order is not complete; there is no order.

Any other defect may be amended, on the requirement of the Commissioners in Lunacy, by the judicial authority who makes the order, and such amendment, if made within fourteen days of the reception of the patient, validates the document retrospectively from the time of admission of the patient.

Until the amending Act of 1891 was passed there was a fifth possible fundamental defect. This was the deletion of the words “specially appointed under the Lunacy Act, 1890.” Under this Act an order was not valid if made by a justice not specially so appointed; but an order made by such an unappointed justice did, if these words were not erased, *appear* to be in conformity with the Act, and therefore, though really invalid, was a sufficient authority for the detention of the patient. If, however, the words were erased, the order was not only invalid, but, as it did not even appear to be in conformity with the Act, it gave no authority for the patient’s detention.

In the Act of 1891, sect. 24, clause 3, it is enacted that a reception order shall not be invalid on the ground only that the justice who signed the order shall *appear* (that is, appear on the face of the order) to have not been duly appointed under section 10 of the Act of 1890, if the order is, within fourteen days after its date, approved and signed by a judicial

authority. From this it appears that an order in which these words are deleted does now authorise the patient's provisional detention until, within fourteen days, the order is validated.

This amendment, unlike all other amendments to orders and certificates, does not require the sanction of the Commissioners.

The Certificates.—As in the case of the Order, the defects in these documents may be corrigible or vital. The vital defects which should prevent the justice from making the order, and which the superintendent should require to be amended before he receives the patient, are five in number—

a. If the words stating that the certifier is registered and in actual practice are deleted. Whether the certifier is or is not actually so registered and practising is a matter which the superintendent is not called upon to investigate. If he be not registered or not in actual practice, yet if the certificate states that he is, the superintendent need not go behind the certificate. If, however, the words are by inadvertence deleted, the certificate is invalid, even although the judicial authority and the superintendent may have knowledge that the person is registered and is in actual practice. The judicial authority ought not to make the order, and if he do make the order, the superintendent ought not, according to the circular of the Commissioners, to receive the patient.

b. If the date of the *examination* is omitted, or is more than seven clear days before the date of *presentation* of the petition.

c. If the words “separately from any other practitioner” are deleted.

d. If either of the certificates are signed by any of the following persons :—

1. The petitioner.
2. Any near relative, partner, or assistant of the petitioner.
3. The superintendent himself.
4. Any person interested in payments on account of the patient.
5. Any near relative, partner, or assistant of persons 3 and 4.
6. Any near relative, partner, or assistant of the other certifier.
7. A “visitor,” viz., a visitor of licensed houses appointed by the justices of the county or borough (except in cases authorised by Section 32).

e. If no “fact indicating insanity,” observed by the certifier himself at the time of examination, be stated in the certificate.

The sufficiency of the facts indicating insanity stated in the certificate is not a matter with which the superintendent need concern himself. They are to satisfy the judicial authority, and if the judicial authority is satisfied, taking them into consideration together with his own observations and such inquiries as he thinks proper to make, it is no business of the superintendent to question them.

(2.) Urgency Order.

When a patient is received under an urgency order it is most essential that the superintendent should satisfy himself that the requirements of the law are complied with in every respect. In the case of an order by judicial authority, the documents have usually passed through the hands of the magistrate's clerk, whose business it is to see that they are in proper form, and in any case the order is made by a justice who is accustomed to the proceeding, is familiar with the requirements, and is unlikely to make any gross and invalidating error in the order. But an urgency order is made without legal assistance, by a person who is commonly totally unused to legal documents, to whom the whole procedure is new, and who is rarely able without guidance to avoid some serious error in the form of the order. Urgency orders should therefore be scrutinised with the greatest care before they are acted on.

The requirements with which an urgency order must comply are as follows :—

1. It must be signed by a near relative of the patient ; or if not, must show the reason why not, and the connection of the signator with the patient, and the circumstances under which he signs must be stated.
2. The order must set forth that the signator is of age, and that he has within two days of its signature seen the patient.
3. It must be dated not more than seven days before the reception of the patient, or must contain a statement that a petition for a reception order is pending.
4. It must have annexed to it a "statement of particulars," and one medical certificate.

The certificate which accompanies an urgency order must state that the certifier has personally examined the patient not more than *two days* before *the reception of the patient*. The date of the certificate may be either anterior or subsequent to the date of the order, and the Act contemplates that it will usually be subsequent, for the order may be dated seven days before admission, but the certificate must not be more than two.

The certificate must contain a statement that it is expedient for the welfare of the patient, or for the public safety, that he should forthwith be placed under care and control, and must give the reasons for this statement.

No obligation is laid by the Act upon the superintendent to satisfy himself of the sufficiency of the reasons contained in the certificate. His authority for the reception of the patient is the urgency order, and if the urgency order appears to be in conformity with the Act, and is accompanied by the certificate in proper form, he may legally receive

the patient. Should he not do so, he may render himself responsible for acts committed by the patient which would have been prevented by his reception.

In other respects the certificate must comply with the requirements of certificates accompanying a petition (p. 214), except that the words "separately from any other practitioner" may be deleted.

An urgency order remains in force for seven days from its date; or if a petition for a reception order is pending, then until the petition is finally disposed of. Unless, therefore, the superintendent receives before the expiration of seven days from the date of the order, a judicial reception order made on petition, *or* a written statement from the petitioner that a petition for a reception order is pending, he must, at the end of seven days from the date of the urgency order, discharge the patient.

(3.) Summary Reception Orders.

Summary reception orders are an exceptional mode of procedure in the case of private patients, and are resorted to in those cases only in which a lunatic is discovered by the authorities to be (*a*) wandering at large, or (*b*) not wandering at large, but not under proper care and control, or cruelly treated or neglected by the relative or other person having care or charge of him.

The procedure and the documents required to authorise the reception of the patient are slightly different in the two cases.

In the case of a lunatic wandering at large the documents necessary are—

1. A summary reception order, which must be made by a justice, who need not be "specially appointed," but must have jurisdiction in the place where the lunatic "is"—that is to say, in the place in which the lunatic is found wandering.

2. One medical certificate.

For obvious reasons, no "statement" is required.

In the case of a lunatic not wandering at large, but not under proper care and control or cruelly treated or neglected by the person having charge of him, the justice, who as before must have jurisdiction but need not be specially appointed, cannot make an order on merely having the lunatic brought before him, but must be set in action by an information on oath. On receipt of this information he directs *two* medical practitioners to examine the patient and make certificates, and upon these two certificates and his own observations he makes his order. In this case, therefore, the documents necessary to authorise the reception are—

1. The summary reception order.
2. Two medical certificates.

It does not appear in the Act that any "statement" is required, although in these cases one would be obtainable; and although the justice is directed by the Act to "proceed in the same manner so far as possible . . . as if a petition for a reception order had been presented by the person by whom the information . . . was sworn," it does not appear that a copy of the information, which takes the place of the petition, need accompany the summary reception order.

The date of the order must be not more than seven days previous to admission, *unless* the order has been suspended by the justice, in which case it must be dated not more than fourteen days before; *or unless* the patient has since the order been taken to a workhouse, in which case also the date must be not more than fourteen days previous; *or unless* the order has been suspended by a medical certificate that the patient was unfit to be removed, in which case it appears that the suspension may be of indefinite duration "until the same or some other practitioner certifies that the lunatic is fit to be removed." By such second certificate the order is revived, and continues in force for three days from the date of revival. So that it appears that a patient may be admitted on a summary reception order, whatever the date of that order may be, if it have been suspended by a medical certificate, and if the patient be brought within three days of the revival of the order by a second certificate of fitness for removal.

The prohibition of certain persons, relations and others, from signing certificates (see p. 214) applies to summary reception orders as well as to orders on petition.

It is to be noticed that the summary reception order differs from all other orders for the reception of private patients, inasmuch as it does not merely authorise, but *directs* the reception of the patient, so that, if the order is in proper form, a superintendent cannot refuse to receive the patient except for a statutory reason (*vide* p. 219).

(4.) Order by Committee.

A lunatic "so found" is admitted, as before the Act of 1889, in two ways, either—

(1.) On an order of the committee of the person of the lunatic, having annexed an "office copy" of the order appointing the committee. Where there are two committees of the person, the signatures of both are required; where there are three, the signatures of two are sufficient.

(2.) By order of a Master in Lunacy.

II. PAUPER PATIENTS.

There are two modes by which the original reception of a pauper patient may be authorised. In either case the superintendent must satisfy himself that the order authorises him to receive the patient, and if it be in proper form and be accompanied by the other documents, he cannot refuse to receive the patient except for a statutory reason (see next page).

The first mode is that of a summary reception order. To render such an order valid the blanks must be filled up and the unnecessary words and no others deleted. The order must be signed, dated, and directed to the superintendent of the institution to which the patient is brought. The order must be accompanied by a statement and by one medical certificate.

Except in the case hereafter mentioned, the order must be signed by a justice, who need not, as in the case of a reception order or petition, be "specially appointed;" and the order must show for what county or borough the signatory justice has jurisdiction. If he have not jurisdiction in the county or borough to which the asylum belongs, nor in a locality that has a contract with or contributes to the asylum, then the order must be endorsed by a visitor of the asylum, and must set forth the reason why the patient is not sent to an asylum belonging to his own locality.

The amending Act of 1891 provides that the order may be signed by the Chairman of a Board of Guardians in lieu of a justice. He must, of course, state in the order the capacity in which he signs.

As in all other cases the order must, as a rule, be dated not more than seven days before the date at which admission is sought; but as in the case of summary reception order for a private patient, this rule is relaxed in the following cases:—(1) If the order has been suspended by the signatory justice, in which case the date of the order may be as much as fourteen days before the date of admission; (2) if the patient has since the date of the order been sent to a workhouse by the order of the justice, in which case the order remains valid for fourteen days, as if it had been suspended by the justice; (3) if the order is suspended by medical certificate that the patient is unfit to be removed, in which case it may remain valid but dormant for an indefinite time, until revived by a second certificate that the patient is fit for removal; but if not acted on within three days of such revival the order lapses altogether, and is no longer valid.

No provision is made in the Act, or in the rules under the Act, of any form by which the execution of the order is to be suspended by the

justice, nor is it even provided that the order shall be in writing or under his hand ; but it is obvious that when a patient is presented for admission with an order of more than seven days' standing, the superintendent of the asylum must have some guarantee that the order has been duly suspended, for he cannot without such warrant admit a patient on an order which, on the face of it, has lapsed, and does not authorise him to do so.

As in the case of reception orders on petition, the summary reception order is valid if it appears to be so, and the superintendent is not obliged to go behind it and to satisfy himself that the medical certificate is in compliance with the Act. That is the business of the justice in the first place, and of the Commissioners in Lunacy in the next. The authorisation for the superintendent is the order ; and if the order be in form, he is not only justified in admitting the patient, but, in the case of a pauper patient, is bound and obliged to do, *unless* the asylum is full, *or unless* the patient is suffering from a contagious or infectious malady, *or comes from a place in which such a malady is prevalent.* *Note.*—An asylum may be full within the meaning of the Act even although there are beds vacant in it ; for the committee may reserve beds for specified classes of cases, and the asylum is deemed full for all other classes of patients when all the other beds are occupied, even though some or all of the reserved beds are vacant.

The only other mode in which the reception of a pauper patient can be authorised is by an order by two Commissioners in Lunacy. The Commissioners, before making the order, have to obtain one medical certificate, and this certificate would no doubt accompany the order and the patient ; but it does not appear from the Act that it *must* do so.

III. CRIMINAL LUNATICS.

If the patient presented for admission is a criminal, the superintendent must receive him if he is accompanied by the warrant of a Secretary of State, which may be signed either by the Secretary of State or by an Under Secretary of State.

Admission on Removal.

If the case is that of a patient who is not now placed under care for the first time, but who is removed from another institution or from single care, the documents necessary to authorise the superintendent to admit the patient are as follows :—

I. PRIVATE PATIENTS.

A. If a written order from two Commissioners in Lunacy accompanies the patient, he must be admitted.

B. If the patient has been detained under a reception order on petition, the necessary documents are:—

1. An order of removal signed by the person having authority to discharge the patient; that is to say, by the petitioner or his statutory substitute (sect. 72), or the person by whom the last payment on behalf of the patient was made.
2. The consent of a Commissioner in Lunacy.
3. Copies of the reception order, petition, statements, and certificates on which the patient was originally received, certified, under the hand of the manager of the institution from which the patient is removed, to be true and correct copies.

C. If the patient was originally detained under an urgency order, which has been superseded by an order by a judicial authority, it does not appear to be necessary that copies of the urgency order and certificates should accompany him on his removal, for he is no longer detained under the urgency order, which has expired. It is, however, advisable, for the information of the medical officer, that copies of the urgency order and certificates should be sent. If a patient is removed before the expiration of the urgency order, copies of that order and of the accompanying documents are, of course, required, together with a removal order and the consent of a Commissioner, as in the previous case.

D. If the patient is detained under a summary reception order, there being no petitioner, the order of removal must be signed by the person who made the last payment on behalf of the patient, and must be accompanied by—

2. The consent of a Commissioner in Lunacy.
3. Copies of the summary reception order, statement, and certificates, certified to be true and correct, as in B. It does not appear that a copy of the information on oath is required.

E. If the patient is a lunatic “so found”—

1. An order by the committee or committees of the person.
2. An “office copy” of the order appointing the committee.

II. PAUPER PATIENTS.

A. If an order by two Commissioners accompanies the patient, the superintendent must receive him, from whatever place he comes.

B. If an order by any two members of the visiting committee of the asylum accompany the patient, the superintendent must admit him—

1. If the patient has previously been removed from the asylum to the custody of his friends by order of the visiting committee.
2. If the patient comes from some other asylum belonging wholly or in part to the same county or borough, or with the authority of which the county or borough has a contract.
3. If the patient comes from some other asylum not belonging wholly or in part to the same county or borough, and with the authorities of which the county or borough has no contract, *providing* that the lunatic is chargeable to some parish in the county or borough.
4. If the patient comes from a workhouse to which he has been sent under sect. 26 of the Lunacy Act of 1890.

This section allows the visitors of any asylum, with the consent of the Local Government Board and the Commissioners, to make arrangements with the guardians of any union for the reception into the workhouse of any chronic lunatics, not being dangerous, who are in the asylum and have been selected and certified by the manager of the asylum as proper to be removed to the workhouse.

The section further provides that every patient so received into a workhouse shall continue a patient on the books of the asylum. The Act does not, however, prescribe the authority by which, nor the form under which, an order is to be made for the removal of patients from an asylum to a workhouse under this section; nor does it provide for the possible necessity of removing the lunatic back to the asylum in case he should cease to be a proper person to be detained in a workhouse. The superintendent or manager is to select the patients and certify that they are proper patients to be removed; but it cannot for a moment be supposed that he is to order their removal. In the absence of any enactment as to the authority for such removal, it will be safe to assume that such removal should be assimilated to the case which it most resembles, of the absence of a patient on trial; and that the order for removal should be made by two visitors with the advice in writing of the medical officer. If, then, the procedure of removal from the asylum to the workhouse under this section is assimilated to that of absence on trial, then the procedure on return of the patient in the former case may probably also be assimilated to the procedure in the latter. If a patient who is absent on trial does not return at the expiration of his period of trial, and does not send to the asylum authorities a certificate that his detention is no longer necessary, he may be "re-taken as in the case of an escape," and no new order is required. Hence it appears that a patient who has been removed to a workhouse under this section, and who, like the patient absent on trial, is still on the books of the asylum, may at any time be brought back by the staff of the asylum without further order; but it is probable that the workhouse authorities have no right to send him back. If, however, any two visitors order him to be sent back, the superintendent must admit him. The arrangement to be made between the visitors and the guardians is to be subject to such regulations as the Local Government Board and the Commissioners in Lunacy prescribe, and they would probably prescribe regulations as to the mode of transference of the patients.

5. If the patient comes from any place other than those above enumerated, the superintendent must admit him if he be accompanied by an order by two visitors and the written consent of the Commissioners in Lunacy.

In every case of removal the order of removal must be accompanied by certified copies of the original reception order, statement, and certificate.

CRIMINAL LUNATIC.

A lunatic who is a criminal must be received, from whatever place he comes, if accompanied by the warrant of a Secretary of State, which may be signed by the Secretary of State himself or by an Under Secretary.

A lunatic who has just ceased to be a criminal lunatic by discharge from the place in which he was confined, or by the expiration of his term of penal servitude or imprisonment, must be admitted if he is accompanied by the order of any justice who has jurisdiction in the place or who is a visitor of the prison from which the patient comes.

The Criminal Lunatic Act provides that with respect to such transfers as the foregoing, the Secretary of State, or justice as the case may be, shall be satisfied, either by a certificate from a medical man, that the patient can be properly treated in an ordinary asylum, or that the committee of the asylum consents to receive him. Supposing, however, that the consent of the committee has not been given, and yet that a patient is presented for admission accompanied by a warrant or order as above described, ought a superintendent to refuse to receive him? If the certificate required has been given, the superintendent must no doubt admit the patient. If no such certificate has been given, and the consent of the committee has been asked and refused, the superintendent will be guided by the instructions of the committee, which he will obtain before the patient is presented for admission. If no certificate has been given and the consent of the committee has not been asked, the wisest course will be to admit the patient under protest, and subject to the subsequent action of the committee, who may request the Secretary of State to transfer him to some other asylum.

Reports and Proceedings on and after Reception.

When the superintendent has satisfied himself that the reception order is sufficient to authorise or compel him, as the case may be, to receive the patient, his next duty is to examine the patient, either himself or by deputy, and as this duty is usually performed by the assistant medical officer, the details of it are described among the duties of the latter. It is not unusual for the examination of female patients on admission to be entrusted entirely to the female head attendant, but this is a practice that should not be countenanced. Every patient should be examined on admission by a medical officer, and if any sign of injury is found on him or her it should be immediately reported to the medical superintendent, who should himself then proceed to examine the patient before the person who brought the patient to the asylum has left the

building (see Assistant Medical Officer, p. 251). A description of the condition of the patient should be entered in the book of Condition on Admission, p. 252, which is then taken, together with the reception order and other documents, to the clerk's office.

In the clerk's office an entry is made in the Register of Patients, the various columns being filled in, excepting that headed "Form of Mental Disorder," and in the last column is recorded whether the patient was admitted on an original reception order or a removal order, and if the latter, the date of the original reception order. Here also the reception order and accompanying documents are copied, and copies, together with a notice of admission, in Form 7 of the Schedule to the Rules, sent to the Commissioners in Lunacy, and, in the case of a house licensed by justices, to the clerk to the visitors also.

In hospitals and licensed houses, the duties above ascribed to the clerk are to be performed by the superintendent.

In case signs of injury are found upon the patient on admission, a description of them should be given in the Notice of Admission. This is not compulsory under the Act or the Rules, but it is a very necessary precaution.

After being copied, the documents, folded, tied together, and endorsed with the name of the patient, the date of his reception order and of his admission, and his number in the register, are placed in the superintendent's office.

On the following morning the superintendent, finding the documents on his table, again examines the reception order, and if it appears that the patient is a private patient, and was not seen before admission by the judicial authority who made the order, the superintendent signs and delivers to the patient a notice in Form 6, Schedule II., of the Act, together with a blank notice of Desire to have a Personal Interview, for the use of the patient.

If the patient within seven days after his reception sign this notice, the superintendent must at once send it by post, *registered*, to the clerk of the justices of the petty sessional division or borough in which the institution is situated.

If it appears that the patient was admitted on an urgency order, it will sometimes devolve upon the superintendent to procure an order by a judicial authority to supersede that order, and in such cases he will take the necessary steps to have the patient medically examined and a petition presented in proper form.

When an urgency order is thus superseded by the order of a judicial authority, the superintendent must transmit to the Commissioners in Lunacy copies of the judicial order, petition, statement and certificates, as if no copies of the urgency order, statement, &c., had been sent. With

these he must send a second notice of admission in the following modified form :—

Date of Reception Order (here give the date of the *judicial*, not the urgency order).

I hereby give you notice that A. B., who was admitted into this [Asylum] as a private patient on the day of 189 on an urgency order dated the day of 189 has been examined by a judicial authority, and I herewith transmit a copy of the Reception Order made by the judicial authority, and of the certificates, and of the petition and statement of particulars on which the said A. B. was received.

A statement of the mental and bodily condition of the above-named patient will follow in due course.

(Signed)

Clerk of the

Asylum.

(Dated)

This form is not prescribed either in the Act or in the Rules, but it is convenient, and it is accepted by the Commissioners in Lunacy.

Whatever the form of the reception order, the superintendent next enters the name of the newly admitted patient in his diary, on a date six days after the date of his admission, and, if he be a private patient, again on a second date one month after his admission, as a reminder that on these dates reports concerning the patient have to be made. He then passes on the documents to the assistant medical officer in order that the latter may enter from them into the Case Book such information as may be desirable.

When the first date thus characterised in the diary arrives, the superintendent enters in the register the form of the mental disorder from which the patient is suffering, and then fills in, signs, and forwards to the Commissioners a statement in Form 8 of the Schedule to the Rules of the Commissioners.

In the case of pauper patients, this statement may be sent with the notice of admission.

In the case of a house licensed by visitors, a similar statement must be sent to the clerk of the visitors.

If the patient has been admitted on an urgency order, which has not been superseded by a judicial order or petition, and if the superintendent has not within seven days of the date of the urgency order received notice that a petition is pending, he must at the end of the seven days discharge the patient.

In the case of an asylum, the entry in the register is to be made within a month of the admission of the patient, but it will usually be found practicable and convenient to make it on the sixth day.

The six-day statement should set forth the form of the patient's malady as entered in the register, and should, under the heading of

"Mental State" give sufficient information to show that the detention of the patient is *prima facie* justifiable. The information need not be detailed, but it should be precise. Thus it is not enough to say, for instance, "He is insane and delusional," nor is it enough to say, "He suffers from dementia and loss of memory." In the first case the statement should be, "He suffers from a delusion that (describing it) and (if it be the fact) from other delusions." The second statement should be, "He states that he does not remember (*his last address, or some other fact which a person of normal memory would know*).

The information as to mental state should always refer both to mind and to conduct. It should describe something that the patient does, or does not do, as well as what he thinks or does not think. Only when thus descriptive does it exhibit, as it always should exhibit, a *prima facie* justification for the patient's detention. The second part of the report, which deals with the bodily health and condition of the patient, should state whether he is well or badly nourished, should describe any signs of injury, and should give the name of any bodily malady from which he is suffering. A copy of this report should be made in the Case Book.

On the arrival of the second of the dates characterised in the superintendent's diary by the entry of the patient's name therein when he is a private patient, the superintendent again fills in, signs, and sends to the Commissioners a report in Form 9 of the Commissioners' Rules. In making this report, the superintendent should have the Case Book before him, and the tenour of his report should be to amplify, elucidate, and where necessary correct the previous report, as well as to record the change, if any, that has taken place in the patient since that report was made. Like the previous report, it should, in its first part, refer to both mind and conduct, and in its second part should describe in very general terms the bodily state of the patient.

As in the case of the previous report, a copy of this report must be sent to the clerk to the visitors in the case of a house licensed by visitors.

II. DUTIES NECESSARY FOR THE RETENTION OF PATIENTS.

Continuation Orders.

The Act of 1890 provides that the detention of a lunatic under his original reception order is to cease and determine at the end of a year, unless it is renewed by a continuation order; and that thereafter his detention is to cease at the end of certain fixed periods unless it is from time to time renewed in a similar manner. This most admirable and salutary enactment has excited much discontent among the superinten-

dents of asylums, but it is in my opinion the most important and the most beneficial of all the provisions of that Act. It provides that every patient shall periodically undergo a thorough re-examination, and his fitness or unfitness for detention in an asylum be re-determined. It will therefore be no longer possible for a patient to be lost in the crowd, and to remain in an asylum forgotten and neglected, as far as investigation of his mental state is concerned, year after year until he dies.

It is of course very important that the date for making the continuation order should not be allowed to slip by unnoticed, for if the order is inadvertently omitted, the patient must be discharged, and the whole formality of obtaining a new order and certificate, and in the case of a private patient a new petition, must be gone through afresh. In order that no such oversight may take place, the following procedure may be adopted. In December of every year the register of patients should be gone through, the name of every patient being taken *seriatim*, and reference to the date of admission and the date of the last continuation order will show whether a continuation order will be required in the coming year or no. In case such an order will be required, the name of the patient and his registered number must be entered in a special diary for the ensuing year devoted to the purpose, on a date fourteen days before the day of the month corresponding with the day on which the patient was admitted. For instance, a patient who was admitted on May 15, 1893, will be entered on the continuation order diary of 1894 on May 1.

It must be remembered that in the case of a patient who has been *removed* to the asylum, having previously been under certificates, the reception order expires at the end of the statutory period after the date, *not* of the admission of the patient, but of the original reception order. For this reason admission on removal should be so described in the register, and the date of the reception order stated therein. When a patient is received on removal the date of his original reception order should be noted, and if it expires within the current year an entry should be made in the continuation order diary.

It is enacted that the continuation orders are to be made not more than one month nor less than seven days before the expiration of the statutory period. Taking fourteen days as a convenient medium, it will appear that there must be entered in the diary under their appropriate dates, the names of all patients whose reception or continuation orders expire between the 14th of January of that year and the 14th of January in the following year.

The patients in whose cases continuation orders must be made in any year must be divided into those whose original reception orders were

made before January 1, 1890, and those whose orders were made since that date.

The orders made before January 1, 1890, if not renewed, expired on May 1, 1891, and on the same date in 1892, and will again, unless renewed, expire on May 1 in 1894, 1897, 1902, 1907, 1912, &c.

Orders made after the 1st January 1890 require renewal at the end of one year from their date, at the end of two years, and at the end of four, seven, twelve, seventeen, twenty-two, &c., years from their date.

It must be borne in mind that the period dates from the making of the original reception order, and not from the date of admission; and though in most cases these will be close together, yet in cases of removal they may be years asunder.

The diary for the year 1894 should contain the names of all patients whose reception orders bear date before the 1st of January 1890, and of all patients whose reception orders were made in 1892 and in 1893.

The diary for 1895 should contain the names of all patients whose reception orders are dated in 1894, in 1893, or in 1891. In 1896 will be required continuation orders for patients whose reception orders are dated in 1895, 1894, and 1892.

In 1897 will be required continuation orders for patients whose reception orders are dated in 1896, 1895, 1893, 1890, and all previous years.

In the case of lunatics so found by inquisition, the date of expiration of the order for the commitment of the lunatic does not depend on the date of the order, but is a fixed date, the same in every case, viz., the 1st of May in 1891, 1893, 1896, 1901, 1906, 1912, &c.

The continuation orders of lunatics so found are to be sent, not to the Commissioners, but to the Masters in Lunacy; and if they are not sent, the order for the commitment of the patient does not, as in the case of a lunatic not so found, necessarily determine, but determines only at the discretion of the Masters, and if they are not satisfied that the patient is still of unsound mind.

The diary cannot, of course, be completed until the 14th of January in each year. It must be referred to every day, and the patients whose names are found under the date of the day are to be examined on that day, and continuation orders made with regard to them, the names being crossed through as the orders are made. Or one day in each week may be set apart for making continuation orders, and all patients entered on days in the succeeding week examined, and their orders made on that day. It would not do to take the days in the preceding week, for, in case of an accident preventing the making the order on that day, the reception orders would lapse, and some patients would have to be discharged.

The Act provides that the reception and continuation orders of patients in any institution may expire on any quarterly day after the date on

which they would otherwise expire, if so ordered by the Commissioners in Lunacy. If the superintendent finds it more convenient to deal with the continuation orders in the mass quarterly than in detail daily, he can apply to the Commissioners for an order accordingly. This method of dealing with the patients is facilitated by the permission given in the Act to include more than one (that is to say, any number of patients) in the same report.

The continuation order consists of two portions:—1. A special report as to (*a*) the mental and (*b*) the bodily condition of the patient; and 2. A certificate that the patient is still of unsound mind, and a proper person to be detained under care and treatment.

The report as to the mental and bodily condition should be as full and on the same lines as the report six days after admission; should, like this report, describe the state both of mind and conduct, and should resemble this report also in affording *prima facie* justification for the detention of the patient.

The certificate with which the continuation order concludes is in common form, and merely needs the signature of the superintendent.

III. DUTIES INCIDENT ON THE RECOVERY OF PATIENTS.

On the recovery of a *private* patient, the superintendent of the institution in which the patient is must “forthwith” send notice of the recovery to the person on whose petition the reception order was made, or to the person by whom the last payment on account of the patient was made, and must state in the notice that unless the patient is removed within seven days from the date of the notice, he will be discharged.

On the recovery of a *pauper* patient, a similar notice and statement are to be sent to the guardians of his union, or to the local authority to which the patient is chargeable.

The Act evidently contemplates the recovery of the patient as the more or less sudden assumption by him of a condition which is instantly and certainly recognisable by his custodian as one of complete sanity. In view of the rarity with which such recoveries are made, this provision of the Act is not likely to be often brought into operation. The usual course of granting leave of absence on trial previous to discharge will no doubt be commonly pursued.

On the recovery of a criminal lunatic, a certificate of his recovery should be sent by *two* medical practitioners to a Secretary of State, who may direct the patient to be remitted to prison.

IV. DUTIES ATTENDING THE DISCHARGE AND REMOVAL OF PATIENTS FROM INSTITUTIONS.

When a patient is discharged from an institution, his reception order lapses, and he becomes a free agent ; but when he is removed, his reception order remains in force, and he is still “detained under care and treatment ;” hence a material difference in the forms attending discharge and removal respectively.

Discharge.

PRIVATE PATIENTS.

The superintendent of *any institution* must discharge a private patient on presentation of an order signed by the person on whose petition the order for the reception of the patient was made, or his legal substitute appointed by the Act (see sect. 72, subsect. 2), *unless* the medical officer certifies in writing that the patient is dangerous and unfit to be at large, with the grounds on which the certificate is founded.

Even if the superintendent do so certify, his certificate may be overruled, and he must discharge the patient if the above-named order is accompanied by the consent in writing of—

- a. Two visitors of the asylum ; or
- b. The visitors of the licensed house ; or
- c. The “Commissioners visiting” the hospital or house.

The wording of this section (74) of the Act is peculiar, and requires close attention. The superintendent cannot legally detain a patient with regard to whom he receives an order of discharge, unless he certify that the patient is *dangerous* and unfit to be at large. Now the term “dangerous” is not used in any other section of the Act. Whenever necessity of detaining a lunatic on account of his dangerous propensities is referred to elsewhere in the Act, it is spoken of as “expedient for the public safety,” and with this is coupled the phrase “or for the welfare of the lunatic.” The only other use of the word “dangerous” is in the second schedule of the Act, and here it is always followed by the words “to others,” and is distinguished from “suicidal,” which precedes it. But in the section in question the term “dangerous” is not qualified by the addition of the words “to others.” The question which the superintendent has to decide in interpreting this section is whether the term “dangerous,” as there used, means, as elsewhere in the Act, “dangerous to others,” or whether it may receive the wider interpretation of “dangerous to himself or others.” That is to say, supposing the superintendent is presented with an order in proper form for the discharge of

a patient who is determinedly suicidal, can he legally refuse to discharge the patient on the ground that the patient is "dangerous" to himself only? The point is a nice one, and is one on which lawyers would probably be equally divided. It places a superintendent on the horns of a dilemma. If he refuse to discharge a patient on the ground that the latter is "dangerous" to himself, he may become defendant in an action for unlawful imprisonment; if on the other hand he discharge the patient, who thereupon commits suicide, he may be held responsible for the death, and possibly may be indicted for "wilfully neglecting a patient." Supposing that the term be interpreted as "dangerous to himself or others," the question will arise, what degree of suicidal propensity will justify the superintendent in refusing the discharge? The safest plan, looking at the matter all round, will probably be, if the patient is suicidal in the first degree, to detain him under certificate; if he is suicidal in less degree, to discharge the patient into the personal custody of the person who signs the order, delivering at the same time a written warning to the latter of the suicidal propensity of the patient; and keeping a copy of the warning, signed by the consignee of the patient.

In the case of an asylum, the certificate of the superintendent may be overruled by any two visitors; but in the case of a licensed house, the consent of "the visitors" to the patient's discharge is necessary. It would appear, therefore, that in the case of a licensed house the consent must be expressed by formal resolution of the Committee of Visitors.

In the case of a hospital, no power at all is given to the visitors or any of them to overrule the certificate of the medical officer. The only means by which it can be overruled is by the consent of "the Commissioners visiting" to the discharge. The consent of the Board of Commissioners would appear therefore to be insufficient. The consent must be of two Commissioners, and must be given on their visit to the hospital.

The consent of two Commissioners given under the same circumstances will overrule the certificate of the superintendent of a licensed house.

An order for the discharge of a private patient from *any institution* may also be made by two Commissioners, one medical and the other legal, within seven days after they have visited the patient.

A private patient must be discharged at the expiration of seven days from the despatch of a notice of his recovery to the signator of the petition or the person who made the last payment on his behalf.

From *an asylum* a private patient must be discharged, whether he be recovered or not, on production of an order signed by three visitors.

On or production of an order signed by two visitors, with the advice in writing of the medical officer.

From a *house licensed by justices* a private patient not "so found" must be discharged on production of an order signed by two visitors, if one of them is a medical practitioner, and if they have twice at an interval of not less than seven days visited the patient, and have examined, if he tenders himself for examination, the medical officer.

PAUPER PATIENT.

From an *asylum* a pauper patient must be discharged on production of an order signed by three visitors.

Or on production of an order signed by two visitors, with the advice in writing of the medical officer.

Or on production of an order signed by two visitors on the undertaking of a relative or friend of the patient, under sect. 79 of the Act.

From a *hospital or licensed house* a pauper patient must be discharged on production of an order by the authority liable for the maintenance of the patient, *unless* the medical officer certifies in writing that the patient is dangerous and unfit to be at large (*ut supra* private patient), *provided* that the certificate may be overruled, as in the case of a private patient, by "the Commissioners visiting," or, in the case of a licensed house, "the visitors" (*vide supra*).

Or on production of an order by two Commissioners, one legal and the other medical, dated within seven days after a visit by them to the patient.

Or on the expiration of seven days from the despatch of a notice of his recovery to the guardians of his union, or the local authority liable for his maintenance.

From a *house licensed by justices* on production of an order signed by two visitors, if one of them is a medical practitioner, and if they have twice at intervals of not less than seven days visited the patient, and have examined, if he tenders himself for examination, the medical officer.

CRIMINAL LUNATIC.

The superintendent of any institution must discharge a criminal lunatic if he receive a warrant of a Secretary of State directing the discharge of the patient.

If the term of penal servitude or imprisonment to which the patient is subject determines, a special duty is cast upon the superintendent (see Removal, p. 233).

With regard to the duties of a superintendent to give notice of the recovery of a criminal lunatic, or of the approaching termination of his sentence (see pp. 228, 233).

IN ANY CASE OF DISCHARGE OF A PATIENT.

Within *two clear days* of his discharge, an entry of his discharge must be made in the Register of Patients, and in the Register of Removals, Discharges, and Deaths.

Within *three clear days* of the discharge of a patient from a *hospital or licensed house*, the superintendent must send written notice to the Commissioners, and in the case of a lunatic so found, to the Lord Chancellor's Visitors.

In an *asylum* these duties devolve upon the clerk.

In case of discharge from a *house licensed by justices*, a similar notice must, within the same time, be sent to the clerk to the justices.

When, on the discharge of a pauper lunatic, the medical officer certifies that the patient has not recovered, and is a proper person to be kept in a workhouse as a lunatic, a copy of this certificate must be sent to the Commissioners, with the notice of discharge.

Removal of Patients from Institutions.

PRIVATE PATIENTS.

A superintendent must allow a private patient to be removed—

A. If the patient was admitted on a judicial reception order (whether summary or after petition) on presentation of an order signed—

1. By "the person having authority to order the discharge" of the patient (sect. 72, subsects. 1 and 2) accompanied by the written consent of a Commissioner in Lunacy.
2. Or by two Commissioners in Lunacy.

B. If the patient is a lunatic "so found," on presentation of an order signed—

1. By the committee or committees of the person, accompanied by an "office copy" of the order appointing him or them.
2. Or, if no committee has been appointed, by a Master in Lunacy.
3. Or by two Commissioners in Lunacy.

PAUPER PATIENTS.

A superintendent must allow a pauper patient to be removed—

A. *From a hospital or licensed house* on production of an order by the authority liable for the maintenance of the patient.

B. *From any institution* on production of an order signed by two visitors of the asylum to which the patient is to be removed, *provided* that the patient is chargeable to a union within a locality to which the asylum wholly or in part belongs, or is chargeable to any locality which has a contract with the asylum, *and provided* that the medical officer of the institution from which the patient is to be removed sign a certificate that the patient is in a fit state of bodily health to be removed.

C. *From an asylum* on production of an order signed by two visitors, *provided* that the medical officer certify as in the previous case.

If, however, the patient is to be removed—

- a.* To an asylum which is not within or does not belong wholly, or in part, to the same county as belongs the asylum from which he is to be removed ;
- b.* Or to an asylum which belongs to a county in some parish of which the patient has not been adjudged to have been settled ;
- c.* Or to a hospital or licensed house outside the county to which belongs the asylum from which he is removed ;
- d.* Or to an institution into which the patient cannot be received under an existing contract ;

Then, unless the patient is outside all the above categories, there will be required, in addition to the order of two visitors of the asylum from which the patient is to be removed, the consent in writing of two Commissioners.

CRIMINAL LUNATICS.

The superintendent of any institution must allow a criminal lunatic to be removed from the institution on production of a warrant from a Secretary of State, directing his removal. The warrant may be signed by the Secretary or by an Under Secretary of State.

If the term of penal servitude or imprisonment to which the patient is subject determines, it is the duty of the superintendent of the asylum in which he is, unless satisfied that the patient is sane, “to take all reasonable means for his being placed under the care of some relation or friend, or in some asylum or place for the reception of lunatics.”

If the term of penal servitude or imprisonment determines, and an order of removal signed by a justice, having jurisdiction in the district in which the asylum is, is presented to the superintendent, he must permit the removal of the patient.

In all cases of removal, the following formalities are to be observed—

1. The superintendent must deliver to the person who removes the patient a copy of the reception order and accompanying documents, and must certify that they are true and correct copies.

2. Notices of removal must be sent in Form 10 of the Schedule to the Rules of the Commissioners ;

In the case of a *house licensed by visitors*, in every case to the Commissioners in Lunacy and to the clerk to the visitors, and in the case of a lunatic “so found” to the Lord Chancellor’s Visitors ;

In the case of a *hospital or licensed house within the immediate jurisdiction* of the Commissioners, in every case to the Commissioners, and in the case of a lunatic “so found” to the Lord Chancellor’s Visitors.

In the case of an asylum, corresponding notices are to be sent by the clerk.

3. Entries of the removal are to be made in the Register of Patients and in the Register of Removals, Discharges, and Deaths. In asylums this duty also falls to the clerk.

V. DUTIES ATTENDING THE DEATH OF A PATIENT.

When a patient in an institution for lunatics dies, entries are to be made in the Register of Deaths and in the Register of Patients, and two statements have to be prepared.

The first statement must be signed, in an asylum by the clerk *and* the medical officer, in hospitals and licensed houses by the "medical person or persons" who attended the patient in his last illness. It must be sent within forty-eight hours of the death to the coroner of the district; and

It must contain the following information:—

- a. The name, sex, and age of the patient.
- b. Condition as to marriage of the patient.
- c. Profession or occupation of the patient.
- d. His place of abode immediately prior to being placed under care and treatment, if known.
- e. The time, cause of, and circumstances attending the death.
- f. The duration and nature of the disease of which the patient died.
- g. The name or names of any person or persons present at the death.

No form for this statement is given in the schedule, but in an asylum in which many deaths take place annually it will be of manifest convenience to have a form of notice to coroner printed, so that no inadvertent omission may be made in the statement that is sent to him.

The following form of notice to coroner is suggested as convenient:—

Asylum for the County or Borough of

We hereby give you notice that
a male [*or* female], patient in this Asylum, aged
years, a ,² whose occupation was that
of , and whose place of abode prior to
being placed under care and treatment was

DIED in this Asylum on the day of
18 , in the presence of

 , at of the clock in the noon.

The cause of his [*or* her] death [as ascertained by
post-mortem examination], was

 of duration.

The circumstances attending his [*or* her] death were
[*or* were not] unusual [in respect that]³

(Dated)

(Signed)

¹ Insert full Christian and surname of patient.

² Insert condition as to marriage.

³ State any unusual circumstances attending the death.

Clerk to the Asylum.

Medical Officer of the Asylum.

To the Coroner for

The second statement or notice of death is to be sent—in asylums by the clerk; in hospitals and licensed houses, by the manager (superintendent). It is to be in the form No. 14 of the schedule to the Commissioners' rules, and is to be sent to the following persons:—

1. The Commissioners in Lunacy.
2. The relation, or one of the relations named in the statement accompanying the reception order.
3. The registrar of deaths for the district.
4. In the case of a house licensed by visitors, to the clerk of the visitors.
5. In the case of a lunatic "so found," to the Chancery Visitors.
6. In the case of a private patient, to the person on whose petition the order was made, or who made the last payment on account of the patient.
7. In the case of a pauper, to the authority to which the patient was chargeable.

The body must not be buried, nor must it be allowed to be removed from the asylum, until the coroner has signified whether or no he considers it desirable to hold an inquest.

N.B.—This rule is not provided by the Act, nor by the Rules of the Commissioners of Lunacy; but it is very important that it should be observed, and a superintendent has been censured by the Commissioners for breach of it.

VI. DUTIES ATTENDING THE ESCAPE AND RECAPTURE OF PATIENTS.

A patient must be considered to have escaped if he have gone and remained outside the boundary of the asylum grounds, and out of sight of the person having care of him, without the leave of the asylum authority. Thus, a patient who is seen to run away and is immediately followed and brought back without being lost sight of, cannot be said to have escaped, even though he may have transgressed the asylum boundary. But if during the pursuit he is lost sight of, then he must be deemed to have escaped, even though he may shortly afterwards be seen and recaptured.

If a patient be allowed out on parole or on trial, and break his parole by not returning at the specified time, he must be considered to have escaped, and notice of his escape must be given accordingly; *unless* he had the intention of returning in time but was prevented from returning by unavoidable accident, in which case no notice need be sent.

If a patient escape from observation, and remain hidden in the asylum precincts, it is not an escape of which notice need be given.

When a patient escapes, he may be retaken at any time within fourteen days of his escape, by the manager of the institution, or by any

officer or servant thereof, or by any one authorised in writing by the manager, who is usually the superintendent. He may also, without any such written authority, be apprehended, as a lunatic wandering at large, by the police, or by the relieving officer or overseer of the district in which he is found. The superintendent cannot, by a mere verbal order, empower any one who does not come under one of the above categories, to apprehend the patient.

A lunatic who has escaped from either of the three kingdoms of England, Scotland, or Ireland into any of the others, may now be retaken in the kingdom in which he is found, and restored to the institution from which he escaped. The necessary procedure will be found in sects. 86-89 of the Act of 1890.

Within three clear days of the escape of a patient from any institution in England or Wales, notice of the escape must be sent to the Commissioners. The notice must give the full name of the patient, his state of mind at the time of, and the circumstances attending, the escape. The object of the description of the circumstances is presumably to enable the Commissioners to determine upon whom rests the responsibility for the escape, and the description of the circumstances must be framed accordingly.

If the escape is that of a lunatic "so found," a similar notice must be sent within the same time to the Lord Chancellor's Visitors.

If the escape is from a house licensed by visitors, a similar notice must be sent within the same time to the clerk of the visitors.

When the patient is recaptured, notices of the recapture must be sent within the same time, under the same circumstances, to the same authorities. When the patient is recaptured within fourteen days of his escape no further formalities are necessary, but when fourteen days have elapsed and the patient is brought back under a fresh reception order, the case must be treated in all respects as an admission. The form of notice of recapture set forth in the rules of the Commissioners provides only that the circumstance of a fresh reception order and certificates being required or not shall be stated. It makes no further reference to these documents, and cannot therefore be considered as a substitute for a notice of admission. In case, therefore, the patient is brought back after the expiration of the statutory period, a new notice of admission, together with copies of the order and other documents, must be sent to all the authorities as in the case of a readmission.

The facts and circumstances of the escape and recapture should in all cases be recorded in the Case Book.

VII. DUTIES ATTENDING THE USE OF MECHANICAL RESTRAINT.

Mechanical restraint can now be legally employed only (1) when necessary for purposes of surgical or medical treatment, or (2) to prevent the patient from injuring himself or others.

The Act declares that "mechanical restraint" shall mean such instruments and appliances as the Commissioners may, by regulations made from time to time, determine; and the Commissioners, in their regulation of April 9, 1890, determine that "mechanical means" of restraint shall be and include all instruments and appliances whereby the movements of the body or of any of the limbs of a lunatic are restrained or impeded.

The Commissioners further order (and their order has the force of an Act of Parliament) that at each visit of Commissioners or of a Commissioner to an institution for lunatics, all instruments which have been employed in the application of bodily restraint since their last visit shall be produced to them by the superintendent.

Under this definition are included not only specially constructed dresses, sleeves, and gloves, which are used for restraint only, but also appliances by which a patient is restrained when restraint is not their ordinary use. For instance, it has been long determined that the wet pack is restraint, and under this order the sheets which have been used in wet-packing a patient must be kept and produced to the Commissioners at their next visit. So, too, must the sheets or blankets or other appliances used for confining a patient in a chair while he is being forcibly fed with the tube.

Whenever mechanical restraint is used, a medical certificate must be signed "describing the means used," and stating the grounds upon which the certificate is founded; that is to say, (1) whether the restraint is used to prevent the lunatic from injuring himself or others, or for purposes of surgical or medical treatment; and (2) why it is necessary. The certificate is to be signed by the medical officer, and is to be made "as soon as it can be obtained," that is to say, not necessarily before the employment of the restraint, but, if not, then as soon after as may be.

The certificates are combined together in a book called the Register of Mechanical Restraint. "A full record" is to be kept of every case of mechanical restraint from day to day. The superintendent must, therefore, record the number of hours during which the restraint is maintained, and the number and duration of the occasions on which it is relaxed, together with the time at which it is varied and particulars of any variation.

Lastly, the superintendent must send to the Commissioners at the end

of each quarter a copy of any entry made during the quarter in the Register of Mechanical Restraint. Whenever, therefore, a patient is mechanically restrained, an entry should be made in the superintendent's diary under a date at the end of the current quarter, to remind him of his obligation to send this notice.

VIII. NOTICES AND REPORTS.

In addition to the notices and reports already alluded to as having to be despatched by the superintendent, viz. :—

Notice of admission.

Seven days' notice.

Four weeks' notice of private patients.

Notice to patient of right to an interview with a justice.

Notice to clerk of petty sessional division of desire of patient for such an interview.

Notice that such an interview would be prejudicial.

Notices of escape and recapture.

Notice of recovery of patient to friends or guardians.

Notice of recovery of criminal to Secretary of State.

Notice of discharge.

Notice that a discharged patient is not recovered.

Notice of removal.

Continuation order.

Notice of death to Coroner.

Notice of death to Commissioners and others.

The following notices and reports are to be sent by the superintendent from time to time, or on occasion :—

In every hospital and licensed house, a copy of every entry made in any of the books of the institution by the Commissioners, or by the visitors—to the Commissioners.

In every house licensed by justices, a copy of every such entry—to the clerk to the justices.

In every asylum, a statement "once at least" in every half year, of the mental and bodily condition of every pauper lunatic chargeable to the union—to the guardians of every union from which the asylum receives patients.

In every licensed house, a "statement" and application for renewal of the license annually—

1. To the Commissioners.

2. If the house is licensed by visitors to the clerk to the visitors also.

In every institution, notice of engagement and dismissal of attendants—to the Commissioners

In every hospital, notice of every contemplated alteration or addition, with plans as provided in the Rules—to the Commissioners.

In every licensed house (if the superintendent be licensee), notice of every contemplated alteration or addition, with plans as provided in the Rules under the Act—to the licensors.

In every hospital, an abstract of the accounts, within one month after they

have been audited or sent to the Charity Commissioners—to the Commissioners in Lunacy.

In every hospital, a copy of the regulations—to the Commissioners.

In every institution, annual statistics—to the Commissioners.

In every institution in which a criminal lunatic is detained, an annual report of the condition and circumstances of the criminal lunatic—to the Secretary of State.

IX. NOTICES, ETC., TO BE POSTED IN INSTITUTIONS.

A. In every institution into which private patients are received—

1. A printed notice of the right of every private patient to have any letter written by him to the Lord Chancellor, or to any Judge in Lunacy, or to any Secretary of State, or to the Commissioners or any one of them, or to the Chancery Visitors or any of them, or to the person who signed the order for his reception, or on whose petition the order was made, or to the Committee of Visitors or any one of them.
2. The right of every private patient to request a personal or private interview with a visiting Commissioner or visitor at any visit of theirs.

These notices are to be printed and hung in such places as the visiting Commissioners or visitors direct.

B. In every hospital, in the visitors' room, a printed copy of the regulations.

C. In every licensed house, a copy of the plan sent to the Commissioners or justices, on applying for the license.

X. CORRESPONDENCE OF PATIENTS.

The superintendent is bound, under a penalty of £20 for each omission, to forward all letters written by patients and addressed to any of the persons enumerated in the first part of Part A of the preceding section.

He is not bound by law to forward other letters, but he should do so when the letters are in themselves unobjectionable, and are addressed to persons with whom the patient has a right to correspond. Letters addressed to the Queen, the Prince of Wales, or other public functionaries not enumerated in the foregoing section, will, of course, not be forwarded; nor should letters be forwarded which are obscene, or which are completely incoherent, or which are calculated to give unnecessary pain to their recipients; but a letter should not be suppressed merely because it is insane, nor because it contains complaints of the treatment that the patient receives in the asylum. The friends of patients will often prefer to receive any news of their insane relatives, even angry and insane letters rather than none at all, as I know full well, having received declarations to this effect from the friends themselves. When letters contain complaints they should be forwarded, and the complaints should at once be inquired into, so that the matters complained of may, if true, be corrected, and, if false, be ascertained to be so.

Superintendents need no longer lay before the Commissioners the letters that are not posted.

XI. VISITS TO PATIENTS.

A superintendent must admit to see a patient any person who produces an order from a Commissioner in Lunacy, and the superintendent of a licensed house must admit any person who produces an order from a visitor. The superintendent of every institution must admit to see a patient and to inspect the place in which he is detained, any person who produces an order signed by the Lord Chancellor or by a Secretary of State. He must also admit the person on whose petition the reception order for a private patient has been made, and any person "specially appointed" by such petitioner to make the statutory visits to the patient. The Act prescribes that these visits shall be made not less often than once in six months; but there is no limit to their frequency, and the superintendent must admit the visitor under this section at all reasonable times, however frequent the visit.

He should also admit any friend of any patient at any reasonable time, unless there is some valid reason in the condition of the patient's health to make it undesirable for him to be so visited. The restrictions upon the visitors of patients' friends are, as a rule, far too stringent, and serve no useful purpose except that of saving trouble to the asylum staff, and this is a purpose which ought not to be served. No amount of trouble should be grudged by the staff if it serves to give comfort to the patients or to alleviate their unfortunate lot.

It is usual to set apart certain hours on a certain day or days in the week for visitors to be allowed to see the patients; and the visitors are not allowed to go into the wards, but see their friends in a separate room set apart for the purpose. The result of these regulations is that very many of the patients are practically prohibited from seeing their friends. Asylums are usually placed at a considerable distance from towns, and in the majority of cases a visit of a working man or woman to a wife or husband in the asylum means the sacrifice of a day's work, and therefore of a day's pay. Visiting day is seldom fixed for a Saturday, when they could attend with little loss, and commonly the result of the sacrifice when made is a glimpse of their friends for a quarter or half an hour.

I think that the regulations as to visiting should be greatly relaxed. Visitors should be admitted on any day; or where a visiting day is fixed, it should be fixed for Saturday. The friends of patients should be allowed, unless there is a distinct objection to this course, to go and see them in their wards. What objections there may be to the presence of male visitors in the female wards, and *vice versâ*, may be easily overcome; and, on the other hand, their presence may often be very

beneficial. If the difficulty of the commingling of insane patients with insane patients of the other sex can be overcome in the recreation hall, the difficulty of their mingling with sane persons of the other sex can be overcome in the wards. The change, trifling though it be, of the occasional presence of a stranger would be beneficial to the great majority of patients; and the privilege of introducing their friends from outside to their friends among their fellow-patients is one that would be greatly valued by the more sensible of the inmates.

XII. CONSENT OF AUTHORITIES IN CERTAIN CASES.

The consent of the Commissioners in Lunacy or of one or more of their Board has to be obtained by superintendents in the following cases :—

1. To the amendment of a reception order or any accompanying document after the reception of a patient. Before the patient is admitted these documents may be amended with the consent of the judicial authority only. In the case of a private patient, the consent of the judicial authority as well as that of the Commissioners is required to the amendment after admission of the patient of any of these documents. His consent must be signified by initialling the amendment.

2. To the absence for more than forty-eight hours of a private patient on trial or for the benefit of his health. The application for their consent must be accompanied by the approval in writing of the person on whose petition the reception order was made, or who made the last payment on account of the patient—one Commissioner; or in hospitals, and houses licensed by visitors, one Commissioner or two visitors. The following is a suitable form of application for their consent :—

SIR,—I beg to apply for the consent of a Commissioner in Lunacy to the removal of A—— B—— from this to [here give the postal address of the house to which the patient is to be taken] for a period of weeks from the of , 189 , under proper control, for the benefit of his health. Enclosed is the consent in writing of the person who made the last payment on behalf of the said A—— B——.

To the Secretary, the Commissioners in Lunacy.

3. To the removal of a private patient from or to any institution—one Commissioner.

4. To the removal of a pauper patient to an institution—*unless* (1) the institution *to* which the patient is removed is in the same county as that *from* which he is removed, or belongs wholly or in part to the same county; *or unless* (2) the lunatic is settled in the parish of a county to which the asylum wholly or in part belongs, or in which the hospital or licensed house is situate, *to* which the patient is removed; *or unless* (3) the lunatic can be removed under an existing contract.

5. To an application to a justice for a warrant authorising the retaking of a lunatic (necessary when a patient has escaped from England into Scotland or Ireland)—Board of Commissioners by authority under seal.

6. For the admission of a boarder into a house licensed by them, two Commissioners. The same consent, or the consent of two visitors, will authorise the admission of a boarder into a house licensed by visitors. In either case the con-

sent can be given only on the application of the intending boarder, and as the Commissioners will require to know whether the authority of the licensed house is prepared to receive the boarder, an application from the resident licensee should accompany the application of the intending boarder.

7. To the alteration of or addition to any licensed bouse—Board of Commissioners. (After production of plans. In the case of a house licensed by visitors, the notice of the proposed alteration and the plans are to be sent to the Commissioners by the clerk of the peace.)

8. To the alteration of or addition to any hospital—Board of Commissioners. (The consent will not be given until after the transmission of full description, with plans of the proposed alteration. *See Commissioners' Rules*, sects. 35 and 36.)

9. To proceedings being taken against an officer, attendant, or servant for an offence under the Act—consent of Attorney-General or Solicitor-General. The only case in which this duty is at all likely to devolve on the superintendent is in that of a licensed house within the immediate jurisdiction, and it should be known that even in this case the superintendent cannot act save by order of the Commissioners, or with the consent above mentioned.

XIII. DUTY OF KEEPING BOOKS.

The books ordered to be kept in every institution for lunatics are—

- a.* A Visitor's Book.
- b.* A Register of Patients.
- c.* A Medical Journal.
- d.* A Register of Mechanical Restraint.
- e.* A Medical Case-Book.
- f.* A Register of Removals, Discharges, and Deaths.

In every hospital and licensed house—

- g.* A Patients' Book.
- h.* A Register of Voluntary Boarders.

In every institution in which both private and pauper patients are received, a separate Register of Patients, Medical Journal, and Register of Removals, Discharges, and Deaths for each class of patients.

The forms for these books are given in the Rules made by the Commissioners under the Act.

Of these the medical officer is in every institution to keep the Medical Journal and the Case-Book. The keeping of both is commonly delegated by the superintendent to the assistant medical officers.

The keeping of the Case-Book is therefore described under the duties of the latter.

SUPERINTENDENT—DAILY DUTIES.

On entering his office in the morning, which he should do not later than nine o'clock, the superintendent first opens his letter-bag, and placing on one side the ordinary correspondence, he attends at once to anything that may be urgent.

Then he goes through the reports of the head attendants and transfers to his diary the names of any patients who have been admitted, removed, or discharged, or who have died on the previous day; also the number of patients of each sex who have been beyond the asylum grounds, who have attended chapel or any entertainment, and who have been usefully employed.

He then takes the reports of the charge attendants and transfers to his pocket memorandum-book the names of any patients who appear there as having been taken ill, as having been violent, as having been injured, or concerning whom any special report has been made. He compares the number of patients in each ward with the number usefully employed, and makes a note if the proportion of the latter seems unduly small.

He next extracts from the same reports, if this have not already been done by the head attendants, the casualties of the previous day, and enters them, together with the deaths, in the appropriate column of the Medical Journal. He does the same with the seclusions. Or, instead of making these entries daily, he may leave them till the following Monday, and make on that day all the entries in the journal for the previous week, signing his name always on that day in the journal. In large asylums in which these entries are made by the assistant medical officers, he passes on the reports to the latter for this purpose.

He next turns to the reports of the night attendants, and notes in his memorandum-book the names of patients entered there as having been ill, noisy, or otherwise noteworthy during the night.

He then examines and signs the diet-sheets and other documents prepared for him by the clerk and steward.

Next he examines the reception orders, &c., of any patients who have been admitted on the previous day, and makes the entries in his diary described on p. 223, and then passes on the documents to the assistant medical officer.

Then he signs notices of death to the coroner, and other official reports.

He then looks over the requisition books for repairs of the artisans and signs them, marking as urgent those which he considers to be so.

He then turns to his diary and makes a list of the names of the patients appearing there under the day's date as to whom six-day, or four-week reports have become due, and of the former he enters the "form of disorder" in the Register of Patients.

To the list thus prepared he adds the names of the patients who appear under the day's date in the Continuation Order Diary, and he sends these lists to the head attendants with orders to have the patients therein mentioned brought to his office at a given hour, say 2 P.M.

He then examines and signs the daily leave lists of the attendants.

Any spare time he may have after these duties are completed and before 10.30, he devotes to his correspondence.

At 10.30 he joins the assistant medical officer or one of them and visits certain of the wards, and in this duty he will be engaged until one o'clock, when he should pass into the dining-hall and give an eye to the quality of the food and the method of serving, after which he may go to his own lunch.

At two o'clock he is back in his office and interviews in turn the patients brought for the purpose by the head attendants, making out the reports concerning them and the continuation orders where necessary. A list of the continuation orders so made is passed on to the clerk to be entered in the Register of Patients.

He then completes his correspondence, and that done, revisits the wards to note their condition as to cleanliness, order, warmth, ventilation, &c., noting in the male wards the same matters as are enumerated on p. 279, after which he visits the post-mortem room on days on which there is an examination, and on other days will find that interviews with the steward, bailiff, engineer, gardener, matron, and other officials, and visits to the scenes of their labours, will leave him but little time before dinner.

After dinner, on nights on which there is a dance or other entertainment, he will be present thereat; and occasionally on other nights he will pay a surprise visit to the wards.

CHAPTER XXV.

ASSISTANT MEDICAL OFFICERS.

THE position of assistant medical officers in asylums is not altogether a satisfactory one, nor can it be said that their duties as a rule are satisfactorily performed. The reasons and the remedies for this state of things will appear in the following considerations.

The superintendents of asylums have often a powerful, and indeed a preponderating voice in the selection of their assistants, and, consciously or unconsciously, their influence is not as a rule exercised on behalf of the best candidate. The superintendent and the assistant medical officer have to work together in the same institution for years, and the endeavour of the superintendent will be therefore to secure in his assistant first of all the presence of those qualities which will make

him a pleasant fellow to work with, and second, the absence of qualities that will bring him into comparison with the superintendent himself. The ideal assistant to the ordinary superintendent will therefore be a good-humoured, pleasant, patient, gentlemanly fellow, with no conspicuous ability, and of no very firm strength of character; one who is not too industrious; who does not take too much interest in the patients; who is content in every scale of value by which the qualities of men are estimated—social, æsthetic, intellectual and moral, as well as professional, to rate the superintendent at a great elevation, and himself at a considerable distance lower down; one who above all things conforms to Talleyrand's maxim *point de zèle*. With such an assistant medical officer, the life of the medical superintendent will no doubt attain its maximum of comfort; and if the comfort of the medical superintendents were the object for which asylums exist, no doubt such are the qualities most appropriate to assistant medical officers. But if the contention of this book is right—that asylums exist for the benefit of the patients—then it is possible to conceive a character more fitting for a medical officer than that which has been sketched above.

If this is the purpose which is to be kept in view, then the best medical officer is he who is at once the most capable and the most willing to care for the patients. That he should be good-humoured, patient, and gentlemanly is important, but still these are not the most important qualities to require of him. He should be of good professional standing, and the reasons should be very cogent which should induce a committee to appoint a man of inferior qualifications over the head of one who has taken a higher degree. The study and treatment of insanity are the most difficult of all departments of medical science, and the man who has to deal with the insane cannot have too complete an intellectual equipment. The possession of a higher qualification is certainly not proof, but it is evidence that a man possesses either superior ability or greater industry than he whose qualification is lower. Seeing that assistant medical officers are the material out of which superintendents are made, and bearing in mind that during the absence of the superintendent the assistant medical officer has to act in his place, it is evident that whatever qualities are required in a superintendent should exist, if not in *esse*, at any rate in *posse*, in the assistant. He should therefore be a man of strong character, with courage to bear responsibility, and resource to deal with emergencies. That he should be industrious and sympathetic it is needless to insist, and he should also have tact in dealing with the rest of the staff.

Deputy-Superintendents.—The great drawback to the position of the assistant medical officer, and the great defect in the organisation of all our asylums is the magnitude of the interval which exists between

the position of the superintendent and that of his assistant. There is an utter want of proportion between the position of a superintendent, with a salary of £600 to £1200 per annum, a house, and the ability to marry, with all the advantages of a family man, and that of an assistant medical officer with a salary of £100 or £200 a year, a single sitting-room, and a thoroughly indefinite prospect of improving his position and being able to marry. The consequences of this great and disproportionate discrepancy are most detrimental to the best interests of asylums, and of the insane who reside therein.

In the first place, the superintendent is put in a position of such high and immeasurable superiority to all the other officers of the institution, that he is under great danger of becoming inflated with arrogance and self-importance, and of subordinating the interests of the asylum to his own individual comfort or glorification. This danger is increased by the suddenness and magnitude of the change which occurs in his position when he is first appointed. The change to him is as great, and commonly as unexpected, as if he had come into a fortune by the receipt of a legacy, and it is not to be wondered at, therefore, if his head is sometimes turned by his elevation.

In the second place, the remoteness and uncertainty of his advancement is a very serious deterrent to a really capable and able assistant medical officer remaining in the service. He sees the best years of his life slipping away from him without any advancement of his interests or improvement in his prospects, and at length, in despair of obtaining any reward commensurate with what he feels to be his deserts, he abandons altogether the practice of alienism, and goes into private practice. Such a result is to be most strongly deprecated on every ground. To the individual it involves the positive waste of some of the best years of his life; but to alienism at large the loss is almost more severe. The experienced man is lost, and his place taken by one who has all his knowledge to acquire. The active and enterprising men leave the branch, and those who remain, to become ultimately superintendents, are the unenterprising, the vegetative, and the dull. The men who desire to marry, who are ready and anxious to take upon themselves the full responsibilities and duties of life, are lost, and those are left who are content to lead an incomplete and mutilated existence. Moreover, the disadvantages of the system being well known, the best men do not offer themselves for posts in asylums; the appointment of a man with really high qualifications being quite an exceptional occurrence.

If there were an intermediate grade of officials—deputy-superintendents—between the superintendent and the assistant medical officers, men who had served their time as assistants, who should be in receipt of salaries at the rate of, say, £350 per annum, *with a house*, and with

permission to marry, the administration of asylums and the case of the insane would be improved to a very material degree. Better men would be attracted to the service of asylums, and the best men would be induced to stay. The ability to marry alone would not only be highly prized by assistants, and would attract and retain men who now would not think of entering or remaining in asylums, but it is a fact patent to all who have had experience in asylums, that the more of the staff that are married, the better in every way for the discipline and administration of the institution. Under the system that is proposed, every medical man, upon entering an asylum, would see that he had a career before him. Under the existing system the chances are great that, as soon as he has gained his experience and become a useful officer, he will retire from the branch and seek his fortune elsewhere.

Apart from these considerations, it is not fair that an officer upon whom must frequently fall the entire responsibility and the entire work of the superintendent, should be remunerated at a rate so miserably inadequate. The holidays of the medical superintendent in most asylums are of a month's duration, and in some extend to six weeks; and for this length of time the assistant medical officer has, where there is only one, to do double duty as well as to take a heavy responsibility over and above that proper to his office, and for this he ought to be rewarded.

For the present, however, we have to deal with the position and duties of the assistant medical officer as they are.

General Duties.—The assistant medical officer is, as his title implies, the assistant of the medical superintendent, and owes to his superior officer a loyal support and assistance. It is the duty of the medical superintendent to be kept aware of everything that goes on in the asylum; and that no matters, save of the most trivial importance, shall be entered on or transacted without his full knowledge and approval. An energetic and capable assistant who is working under a negligent and *fainéant* superintendent is often strongly tempted to enter on some new departure, either in the absence of his chief, or under the belief or the knowledge that the latter is not sufficiently interested in the matter to make it worth while to seek his sanction before the change is made. Such a proceeding is, however, wrong in principle. It is disloyal towards the officer who is responsible, it must be remembered, ultimately for everything that goes on in the asylum; it sets a bad example to subordinates; and it places the assistant himself in a false position, from which he is sure sooner or later himself to suffer.

He should place before the superintendent every plan that he proposes to follow, should obtain his approval before embarking on it, and should pursue it as authorised and required to do so by his chief. In nothing is the excellent old rule, of doing as you would be done by, a safer guide

than in matters of this nature. In case the medical superintendent should veto some pet project of his assistant, the latter has nothing to do but to submit, and to submit with as good a grace as he can. The chief is the absolute and sole arbiter of what is and what is not to be done. He alone is responsible, and in this, as in all else, responsibility and power must go together.

While thus giving loyally every information to the superintendent that is of importance for him to have, the assistant medical officer should avoid pestering him with petty complaints as to the conduct of attendants, &c. Anything of real importance he must, of course, report; but there are many small lapses from duty which are sufficiently dealt with by a reprimand from himself, and there is no necessity for him on the one hand to trouble with petty things the superintendent, who is already sufficiently burdened with responsibility in more important matters, nor on the other for bringing attendants into, perhaps, undeserved ill-favour by bringing their names with undue frequency before the chief. He may, in familiar converse, keep the superintendent informed of what is going on without making mountains out of molehills by official reports.

Towards his fellow-officers the assistant must cultivate cordial and friendly relations. It has been said with much truth that if you want to quarrel with a man, the best way is to travel with him; the implication being that when people are thrown very much together, the familiarity of their converse leads them to disuse those little restraints and benevolences which are always assumed towards strangers—to appear in, as it were, a moral *déshabille*, the niceties of their moral toilette being discarded for the sake of freedom and convenience. Moreover, people who are very much together get, after a while, bored with each other; and, lastly, persons who live in a very small world, with but few interests, and insufficient employment for their faculties, as is the case for the most part with the officers in asylums, are extremely apt to get into ways of bickering and squabbling. In so limited a world, in which spheres of duty and of liberty are not precisely defined, and in which several individuals are nearly co-ordinate in rank, questions of precedence, of the limitation of functions and their complementary difficulty of interference, are sure to arise; and if not managed with tact, forbearance, and goodwill, are sure to lead to regrettable differences, squabbling, friction, and the necessary consequence, impairment of efficiency in the administration of the institution. The assistant medical officer is bound to remember that he holds his position for the benefit of the institution, and to subserve the welfare of the patients; that any friction among the officers must necessarily hinder and obstruct the attainment of these ends; and that it is therefore his duty to minimise any friction, and to

preserve towards his brother and sister officers that attitude of peace and goodwill which will best conduce to the harmonious working of all toward the common end of all—the welfare of the patients.

In pursuance of the same object, the assistant medical officer should be cautious, when, in the absence of his chief, he takes the place of the medical superintendent, to exercise his powers with modesty and self-restraint, so that his colleagues may not have reason to regret the substitution.

The special duty of the assistant medical officer is the medical care of the patients. He is not, as his chief is, hampered, hindered, and interrupted by a variety of other duties. He is able, and is required, to devote his whole time to the study and treatment of insanity as manifested in the patients under his care, and to this duty his attention should be unremitting.

With regard to the general aspects of his medical duties I have nothing to say, as these do not pertain to the management of the asylum, with which alone this book has to do; but there are special aspects of these duties which do concern management, and which have to be treated of here.

There must be no delay nor slackness on the part of the assistant medical officer in attending any summons that he may receive to the wards; nor must he ever find fault with an attendant for sending for him unnecessarily. It is the custom of some medical officers scarcely ever to attend at once to such a summons, and with very many to attend with insufficient promptitude. Such a practice is extremely wrong. Its wrongness consists not merely in the chance that it opens for the occurrence of some terrible incident, such as the death of a patient unattended, although such an incident is sure to occur sooner or later. The vice of the practice is that it is a direct object-lesson to the attendants that the welfare of the patients is considered by the medical officer a matter of very secondary importance compared with his own comfort; and if such an example is set to the attendants by their superior officer, to whom they have to look for guidance and direction, it is very sure that that example will not be disregarded. Every summons to the wards should be attended to immediately, and not only so, but every attendant should be taught that he is to send at once for the assistant medical officer at any hour by day or night whenever he is in the least difficulty or doubt about the condition of a patient. When, therefore, the medical officer is sent for, and the summons is found to have been unnecessary, the attendant is rather to be commended for watchfulness and caution than reprimanded for excess of zeal. The more clearly and pointedly the superior officers of an asylum make it understood that the welfare of the patients is the first object of their own solicitude, the more surely will

this object be kept before the attention of the subordinate officials, and the better the general tone of the whole asylum.

The most important of these special duties is the keeping of the Case-Book, a matter which is usually and necessarily relegated entirely to the assistant medical officer. The rules issued by the Commissioners in Lunacy require the following particulars to be entered in the Case-Book :—

First.—A statement to be entered of the name, age, sex, and previous occupation of the patient, and whether married, single, or widowed.

Secondly.—An accurate description to be given of the external appearance of the patient upon admission : of the habit of body and temperament, appearance of eyes, expression of countenance, and any peculiarity in form of head ; physical state of the vascular and respiratory organs, and of the abdominal viscera, and their respective functions ; state of the pulse, tongue, skin, &c. ; and the presence or absence, on admission, of bruises or other injuries to be noted.

Thirdly.—A description to be given of the phenomena of mental disorder : the manner and period of the attack, with a minute account of the symptoms, and the changes produced in the patient's temper or disposition ; specifying whether the malady displays itself by any, and what illusions, or irrational conduct, or morbid or dangerous habits or propensities ; whether it has occasioned any failure of memory or understanding ; or is connected with epilepsy, or ordinary paralysis, or symptoms of general paralysis, such as tremulous movements of the tongue, defect of articulation, or weakness or unsteadiness of gait.

Fourthly.—Every particular to be entered which can be obtained respecting the previous history of the patient ; what are believed to have been the predisposing and exciting causes of the attack ; what the previous habits, active or sedentary, temperate or otherwise ; whether the patient has experienced any former attacks, and, if so, at what periods ; whether any relatives have been subject to insanity ; and whether the present attack has been preceded by any premonitory symptoms, such as restlessness, unusual elevation or depression of spirits, or any remarkable deviation from ordinary habits and conduct ; and whether the patient has undergone any, and what, previous treatment, or has been subjected to personal restraint.

Fifthly.—During the first month after admission, entries to be made at least once in every week, and oftener where the nature of the case requires it. Afterwards, in recent or curable cases, entries to be made at least once in every month ; and in chronic cases, subject to little variation, once in every three months.

In all cases an accurate record to be kept of the medicines adminis-

tered, and other remedies employed, with the results, and also of all injuries and accidents.

That the several particulars, hereinbefore required to be recorded, be set forth in a manner so clear and distinct as to admit of being easily referred to, and extracted, whenever the Commissioners shall so require.

CASE TAKING.

While still in the waiting-room, the patient will be measured and weighed.

When the patient is taken to the bath-room, the medical officer must examine him as soon as stripped, and before being bathed. Female patients, for the purpose of this examination, should be stripped, placed on a couch, and covered with a blanket. They can then be examined with thoroughness as well as decency. The examination of female patients should be conducted by the medical officer, and not left to the head attendant.

The medical officer should notice and record :—

1. *Identifying marks*: height, weight, complexion, colour of hair and eyes, deformities and malformations, tattoo-marks, moles, warts, callosities, scars.

2. *State as to cleanliness*: dirt on skin, stickiness of hair, signs of vermin. Flea-bites are distinguished by a minute red puncture surrounded, when fresh, by a pink flush from one-eighth to one-quarter inch in diameter. Body lice are suspected when we see scratches that have drawn blood about the shoulders and waist. The lice will be found in the folds of the underclothes. When there are lice in the head, nits may be seen in the hair. Examine the hands for indications of scabies.

3. *Look for other rashes*. A considerable number of cases of eruptive fever with delirium have been admitted into asylums as cases of mania. Never fail, therefore, to notice the presence or absence of rash, especially of the inconspicuous rash of typhoid fever.

4. *Signs of injury*. Never fail to examine for broken ribs. Note all bruises, their position, size, and colour, the latter being an indication of their age.

5. Note the presence or absence of goitre, enlarged glands, hernia, nodes, varicose veins, sears on the penis and on the groin.

6. Take the temperature, the pulse, respiration, and state of the tongue.

The medical officer should never omit any of the foregoing particulars, for there is not one of them whose existence or non-existence at the time of admission may not turn out to be a matter of the utmost importance at some subsequent stage of the case. It is not enough to record their

presence when present ; their absence, if absent, should also be positively recorded. Printed forms containing all these particulars in blank should be kept by the medical officer and filled in by him *at the time of examination and in the presence of the patient.*

FORM OF "CONDITION ON ADMISSION" BOOK.

(Date)

Name of patient,	Sex,	Age,
Where from,	By whom brought,	
To what Union chargeable,		

IDENTIFICATION.

Height,	Weight,	Complexion,	Hair,	Eyes,
Deformities, ¹	Malformations, ¹			
Moles, ¹	warts, ¹	callosities, ¹	and pigment marks, ¹	

CLEANLINESS.

Clean, ²	Dirty, ²	Very dirty, ²
Signs of fleas, ¹	Bugs, ¹	Lice on body, ¹
Lice on head, ¹	Scabies, ¹	

NOURISHMENT.

Very stout, ²	Stout, ²	Well nourished, ²
Thin, ²	Emaciated, ²	Greatly emaciated, ²

RASHES.¹

INJURIES.

Broken ribs, ¹	Bruises, ¹	Other injuries, ¹
---------------------------	-----------------------	------------------------------

SIGNS OF DISEASE.

Enlarged glands, ¹	Hernia, ¹	Nodes, ¹
Varicose veins, ¹	Scars, ¹	
Temperature,	Pulse,	Respiration,

(Signed)

Medical Officer of Asylum.

(Signed)

Person bringing the Patient to Asylum.

If the matter is left until he has quitted the patient and returned to his room, he is quite certain to omit some of the particulars. Instead of loose printed forms, a book of such forms may be kept ; but in any case

¹ If none, the fact to be so stated.

² Strike out the words not required.

the form when filled in should be read out to the relieving officer or other responsible person who brought the patient, and a statement to that effect should be signed by him, and a copy signed by the medical officer delivered to him. If this were done in every case, there would be an end, once for all, of the regrettable conflicts of evidence that from time to time arise as to whether injuries found upon patients were inflicted before or after their admission to asylums.

Unless reasons have been discovered during this preliminary examination to contra-indicate such a course, the patient is thereupon to be bathed ; he is then subjected to a thorough examination of his thoracic and abdominal organs, and assigned to a suitable ward, there to await a more systematic inquiry into the symptoms and history of his malady.

In conducting this inquiry the medical officer has to bear constantly in mind certain broad principles for guidance. He has to determine, first, what manner of man the patient is ; second, what position in life he was required to fill ; and third, the particular way in which he has failed to fill that position. He should then go on to investigate, fourth, the conduct of the patient, and to determine wherein and how far it is defective or erroneous ; and fifth, the same particulars with regard to his mind. He must throughout endeavour to obtain and record positive evidence that the patient is of unsound mind and a proper person to be detained under care and treatment.

The writer has demonstrated elsewhere that insanity is the failure of the process of adjustment of self to surroundings, and this expression of the nature of insanity is now widely accepted. If it be true, it follows of necessity that a full investigation of the circumstances of a case of insanity requires an examination of the individual himself, of his surroundings, and of the way in which he has adapted or failed to adapt the one to the other.

To know what the individual himself is, we must first get at his parentage, and as far as possible at his ancestry. The existence of insanity, epilepsy, hysteria, and other neuroses in the family, as well as of phthisis and of drunkenness, should be inquired for, and inquiry should also be made as to consanguinity and exsanguinity in the parents, the health and age of the parents at the time of conception, and of the mother during pregnancy.

As to the patient himself, the following information should be sought for with regard to his childhood. Was he a full time child ? Was the birth assisted by instruments ? Was labour greatly prolonged ? The use of forceps sometimes leaves permanent damage to the brain, and even a lasting impression on the skull itself. The great pressure and deformation of the skull that take place in very prolonged labours may easily cause permanent damage to the structure of the brain.

The next points are in the history of the patient in infancy. Was he a forward or a backward child? At what age did he walk, talk, get his teeth? Did he suffer from any fall, or blow on the head, or severe illness in infancy? Was he subject to convulsions? to St. Vitus' dance? to laryngismus stridulus? night terrors? fits of causeless screaming?

At what age was puberty established? Was it attended by great disturbance? by pronounced hysteria? masturbation? epilepsy?

What was the patient's position at school? What standard did he attain? and at what age?

At what age did he first obtain remunerative employment? What was the nature of the employment, and the amount of the remuneration?

What illnesses has he suffered from, at what times, and for how long? Inquire especially for eruptive fevers, phthisis and syphilis, gout and rheumatism.

What employment has the patient followed, and for how long? Has he earned his own living or been dependent? Nature of employment, number of hours per diem employed, precariousness or certainty; absorbing character of employment; whether it makes great demands on the attention; degree of responsibility attaching to it. Occurrence of any great change in circumstances; whether thrown out of employment; loss of fortune; retirement from business.

If married, at what age? Age of wife or husband; number and age of children, and rapidity of succession. Miscarriages and abortions. Happiness or otherwise of marriage, unfaithfulness of husband or wife. Immorality. Seduction. Love affairs.

Having sketched the history of the patient up to the time of his attack, the medical officer has next to detail the events of the illness. He must inquire—What was the first thing that led the friends to suspect that the patient was not sane? What was the nature and what the date of the earliest indications of insanity? By whom were these indications first noted? How long was the patient allowed to manage himself and his affairs after these indications appeared, and what was the immediate occasion of his being placed under restraint?

Has he attempted suicide? And in what way?

Has he been violent? To whom? Under what circumstances?

Has he recently been eating and sleeping well or badly?

It is evident that the greater part of the foregoing inquiries must be made not from the patient himself, but from his friends, and for this purpose the medical officer must make a point of always seeing the friends of a patient upon their first visit to him. Whatever information is obtained from the patient must be checked by subsequent inquiries made of his friends.

Pending the opportunity of making these inquiries, the medical

officer will proceed to the examination of the patient himself, and the determination of the manner of man that he is.

The elementary facts as to his condition on admission will have been noted in the bath-room as above detailed. This examination must be followed up by a more detailed and systematic investigation of the patient's physique and condition.

The first facts to record in the Case-Book are the name of the patient, his or her age, sex, occupation, condition as to marriage, religion, and the date of admission.

Then will follow a description of his general appearance, habit and temperament, under the following headings:—

Stature and make, whether small-boned, long-necked and weedy, or burly, compact, and thickset. Any peculiarity in the shape of the head.

The *hair* may be thick or scanty, coarse or fine; dark, light, reddish, or grey; lanky, curly, or frizzled; saturated with secretion, moist or dry; lying close to the head, or erect and staring. *On the face* hair may be, in men, scanty or absent; in women, masculine in coarseness and abundance.

Complexion may be fair, ruddy, pale, dark, sallow, chlorotic, cyanotic, tanned.

Expression of face may, of course, be extremely various, and is often most difficult to describe. Description is however necessary, whenever there is anything unusual to describe, and, in addition, but not in substitution, for this description, photographs should be taken in at least two attitudes. Directions for photographing patients will be found further on. Besides the expression of face, the *attitude*, which is often highly characteristic, should be noticed and, if need be, described. The chief things to look for in facial make and expression are: general shape, as square, round, or oval, lateral symmetry, proportion of face to cranium. On a front view a horizontal line across the bridge of the nose, passing through the outer canthus of each eye, should nearly bisect a line from the crown of the head to the cervico-mental fold. On a side view this line passes through the point at which the helix of the ear joins the temple. In profile a vertical transverse plane touching the front of the temporo-maxillary articulation, should bisect the cranium. The magnitude of the departure in the case before him, from these ideal proportions, should be recorded, with as near an approach to accuracy as may be, by the medical officer, who may also, in any special case in which it appears desirable, measure (with calipers) the occipito glabellar and transverse diameters, contrasting the least trans-temporal with the greatest trans-parietal measurements, and in addition (with a tape), the circumference immediately above the ears.

Other points to notice about the face are: the exaggeration or obliteration

tion of folds and wrinkles, the bloated appearance and watery eye of the drinker, the baggy lower eyelid of the subject of prostatic disease, the little tortuous bloodvessels on the cheeks of the fibroid diathesis, and the numerous other appearances the enumeration of which pertains to general medicine.

The significance of the high palate and the V-shaped palatal arch have been diminished of late years, but they are matters that should be recorded. The form of *ear* is often significant. The lobule may be exaggerated in size, a peculiarity which is said to go with a sensual disposition; or it may be unduly small, or nearly absent, which is a reversion to simian form, or adherent by its whole anterior margin to the cheek. The helix may be almost absent, being represented by a mere slight eversion instead of a complete folding over of the edge. The size of the Darwinian nodule is a curious point, but of no practical significance. *Hæmatoma auris*, or the cicatrix that results from it, should always be noted if present, and its absence if absent, for its origin in the asylum may be held to indicate violence used by attendants.

The size of the *eyes* and their prominence or sunken position are of less importance than their closeness together or distance apart, and the development of the eyelids. Ill-developed eyelids in which the skin appears to be insufficient, of which the opening is contracted, and in which a sharp crescentic fold appears passing up from the inner canthus, usually go with ill-developed brains. The condition of the pupil falls, of course, among the investigation of the nervous system.

The state of the *hands* should be noticed. The various callosities of handicraft are a matter of curious study, but do not specially concern the alienist. What he should notice is merely generally the condition as indicating toil or leisure. The presence of ridges on the nails indicates the occurrence weeks or months, not more than six months, before, of a nervous crisis of some kind, sometimes of an attack of mania. The hands of the insane are often sweaty and moist, sometimes to such a degree that the epidermis is macerated, and can be scraped off in rolls. The hands of those who have long lived in complete idleness, and of persons of low nervous tension, assume a characteristic attitude in which the thumb diminishes in opposition to the fingers and lies alongside of them, with the knuckle nearly in the same plane with theirs. The existence of chilblains should be noted, the hands of imbeciles being sometimes covered with aggravated chilblains which are very difficult to manage.

The patient should now be subjected to a medical examination as to the validity of his nervous system and that of any other bodily organ still unexamined, as to which no directions need be given here.

CONDUCT.

“*Conduct* is the most important of all the factors that the alienist has to consider, for by conduct, and by conduct alone, can we judge of sanity or insanity.” The foregoing sentence is the introduction to the article on Conduct by the present writer in “Tuke’s Dictionary of Psychological Medicine;” and to this article the reader is referred for a more extended study of the subject. As laid down in that article, in pursuance of the system of Herbert Spencer, the several departments of Conduct are as follows :—

1. Directly self-preservative.
2. Indirectly self-preservative.
3. Reproductive.
4. Social and Political.
5. Religious.
6. Recreative.

The great and conspicuous advantage of this method of studying and estimating conduct is that it follows the true order of evolution, and therefore the inverse order of dissolution; in other words, the order in which the varieties of conduct are here classed is approximately the order in which they are acquired by the individual, following in his turn the order in which they have been acquired by the race to which he belongs. And when conduct begins to degenerate and to become disordered and degraded, its several forms are attacked in the inverse order of that in which they are here arranged. The point at which the medical officer has to begin his detailed investigation is, therefore, an immediate indication of the extent to which the malady of the patient under consideration has progressed, and therefore, according to many of the classifications in vogue, an identification of the form of his insanity.

1. Directly Self-Preservative Conduct.—This falls into three divisions. *A.* The prehension of food. *B.* The avoidance of mechanical injuries. *C.* The avoidance of other physical dangers.

A. The Prehension of Food.—This is the most fundamental of all the activities, the first phase of conduct to be acquired by the new-born child, the last to be relinquished in the general wreck of the faculties. The patient who has lost the power to feed himself has nothing more to lose save the power of breathing. Apart from the mere loss of the power of feeding,—the loss of the art of prehending the food and carrying it to the mouth,—this form of conduct may be disordered in various ways. A patient may eat with abnormal voracity, cramming his mouth with more food than he can swallow, or, on the other hand, he may play with his food and finick about with it for a length of time, spending

perhaps an hour over a plateful, but at last eating it all. Or he may refuse to eat except in solitude, or except standing, or unless he can steal the food; or he may refuse certain kinds of food, as meat, or vegetables; or, finally, he may refuse food altogether. If he do not refuse food, he may decline the use of implements, and eat with his fingers, which is really, of course, a social, not a self-preserved degradation, and so falls properly to be dealt with in a later section. Defects of swallowing, too, do not properly belong here. Swallowing, being a reflex act, does not belong to conduct but to pathology. It is a purely bodily malady and belongs to the province of the physician, though it is frequently associated with insanity, and especially with the insanity of general paralysis.

B. *The Avoidance of Mechanical Injuries*.—Activities of this class also are of a very low grade, and impairment of them signifies a great depth of dementia. If a patient has not sense enough to take into account the existence of a step, and to adjust his action accordingly; if he has not sufficient intelligence to get out of the way of passing vehicles, to keep from falling into the water or the fire, he must be very demented, and this inability marks and characterises a definite grade of dementia.

The chief importance of regarding this sub-class of activities does not, however, lie in their impairment and loss, but in their perversion. In too many cases the "natural instinct of self-preservation" is not only absent, but is replaced by a positive craving of the opposite character. While the power of self-conservation is uninjured, the desire is transformed into a longing for self-injury and self-destruction. It is unnecessary to enter here into a philosophical explanation of this transformation, and the more so since the author has gone into the matter at some length in a previous work.¹ All that is here required is to remind the medical officer of the points into which he must make inquiry, and which he must record in connection with this perversion of conduct in his patient.

The first question that has to be determined is whether any suicidal tendency exists, and this question is often most difficult to settle. It is not always the patient who talks of suicide who is really inclined thereto, nor is a patient necessarily exempt from the tendency who never refers to it. The only test is that of conduct—it is conduct that we are dealing with—and the only trustworthy indication of suicidal tendency is an attempt at suicide. Should any attempt have been made, it is most important to record minutely the manner and circumstances, which afford a warning as to future attempts, and a guide as to the method of preventing them. Thus, inquiry should be made as to whether any weapon or appliance was used, and how such weapon or appliance was

¹ "Sanity and Insanity," chap. xiii.

obtained; whether it had been secreted or constructed beforehand for the purpose of suicide, or whether the sight of the weapon suggested the purpose, which was attempted on sudden impulse. The motive of the suicidal attempt should if possible be recorded.

C. *The Avoidance of Non-Mechanical Physical Dangers.*—The acquisition of these activities is later than that of the preceding, and marks an advance of intelligence, and correspondingly they are sooner lost; and their loss indicates a degree of dementia, deep indeed, but not so deep as signified by the loss of those. The normal human being will endeavour to accommodate his clothing and dwelling to the temperature in which he lives. The dement who has reached this low level of deterioration will make no such endeavour. He will lie nude at night in the bitter cold, with his bed-clothes in a heap by his side, and without the sense to cover himself; or he will huddle over the fire until his feet are blistered by the heat without being prompted to move away.

Among the non-mechanical physical dangers that have to be avoided are those arising from the neglect to perform normally the functions of micturition and defæcation. The lapse into "dirty habits" becomes an affair of conduct only when the nervous mechanism of the sphincters is in proper working order. It would be clearly inaccurate to speak of a patient, whose severed spinal cord had deprived him of control over his sphincters, as of dirty habits, and equally inaccurate would it be to apply the same term to a patient in the last stage of general paralysis. The term becomes applicable as descriptive of conduct only when it depends on fault, not of the inferior mechanism, but of the higher nervous arrangements which actuate conduct.

Normally, the habit of discharging the liquid and solid excrements at a sufficient distance from the regular place of abode, to prevent the occurrence of a nuisance, is a very primitive and deeply ingrained one, and is shared with human beings by animals so unintelligent and uncleanly as even the domestic pig, and even by newly hatched birds. But in deep dementia it is often lost; and in many cases in which the deprivation of mind is by no means great, conduct becomes in this respect faulty, and patients will pass their urine and fæces under them as they sit, and especially as they lie in bed. Such a defect of conduct makes a great depth of degradation from the normal; for the more primitive the acquisition of a faculty, the more stably and securely is it fixed in the constitution, and the more difficult is it to disturb and destroy. A faculty which is acquired so early in the life of each individual, and which is common to a very wide range of the lower animals, is extremely primitive, and its derangement and loss indicate a very profound disturbance of the nature of the individual so affected. The lapse always occurs sooner in the case of the bladder than in that of the

rectum, and patients are much more apt to be "wet" than to be "dirty." The reason is obvious, for control over the anal sphincter is acquired much earlier than over that of the bladder, which is sometimes imperfect even up to the age of puberty; and in dissolution of conduct, as of mind, properties and functions are lost in the inverse order of their acquirement.

Not infrequently this phase of conduct suffers perversion as well as loss, and patients take such a positive delight in bedaubing their persons and surroundings with their own filth as goes far to corroborate the ancient maxim, *Stercus suum cuique bene olet*.

It is important, therefore, to note whether a patient is "wet" or "dirty," and how often and under what circumstances these lapses take place.

2. Indirectly Preservative Conduct.—By this is meant that range of conduct by which a man earns his livelihood. Several matters demand inquiry and record in connection with this class of activities. The first is the degree of elaborateness of the employment—how far it is merely mechanical, involving the lifting of weights and the like muscular efforts, and how far it is intellectual; of what employment the patient is now capable, and how this capability compares with his previous ability, and with the average ability of his class; If he has previously been in employment, and can now no longer follow it, the precise reason and nature of his failure; his commercial dealings, how far they are prudent or the reverse; the reward which he is content to consider adequate for his labour. The persistence or otherwise of his efforts is to be noted, as is also the tendency to acquire and save, or to expend and give away. Many of the insane are assiduous accumulators, and will fill their pockets and stuff their clothes with all kinds of things, some valuable, others mere rubbish. Others will give away everything they possess, even to their clothes. Many spend a disproportionate amount of time and labour in the manufacture of trivial ornaments out of scraps of materials—bones, feathers, paper, wire, glass, slate, &c. &c.

3. Reproductive Activities.—The third great division of conduct comprises those activities which subserve the production, maintenance, and rearing of offspring. Regarding this division of conduct from a thoroughly comprehensive point of view, it includes the whole of the activities concerned in the production and maturation of a human being, from the first devices intended to attract the opposite sex up to the last stage, in placing the offspring in a position to gain his own livelihood. Hence the first subject that falls to be investigated under this heading is that of dress.

Dress has, in our elaborate and complicated stage of civilisation, become significant in many ways. It is indicative in various ways of

sex, of age, of health, of climate, of rank and social position, of wealth, of nationality, of occupation, and even of political opinion ; but primarily and originally, dress was an affair of sex, and of sex only. The beginnings of dress, the first rudiments of costume, were always adornments, and were assumed for the purpose of attracting the opposite sex. The next articles of costume added were simple screens for the purpose of concealing the sexual organs, and were, of course, also of sexual origin. Subsequently were added garments for protection against the weather ; but these never failed to serve also for the purpose of adornment, and when the two purposes were found incompatible, the protective purpose had to give way and be discarded in favour of the ornamental ; and the ornamental purpose of dress was of course, at first exclusively, and is still primarily, a sexual purpose. It is meant to attract the opposite sex. For this reason it is under the present heading that the question of dress has to be considered. Although not exclusively a sexual question, it is so primarily and by origin, and as it is not convenient to separate it, it must be dealt with here as a whole.

The limits of possible variation in the dress of patients in asylums are unfortunately not very wide, and are not nearly as wide as they might be, and the result of inquiry and record under this head is therefore less instructive within than outside the limits of asylums ; still, even within the narrow scope of individual variation possible, many instructive facts may be observed.

The first thing to be observed is the general neatness and cleanliness of the dress. Are the fastenings, the buttons, hooks and eyes, &c., attended to ? Are the stockings kept up, or allowed to fall about the heels ? Has the patient slobbered all down the front of his coat and waistcoat, or the woman of her dress ? Does he or she twist the buttons off or tear or destroy the clothes ? Is the hair kept tidy ? Are there any attempts at decoration of the costume ? and if so, are they of normal character, or are they exaggerated, grotesque, or bizarre ? Notice the use of feathers, bits of glass, &c. ; of sham medals, stars, and orders ; of coronets, &c. Notice the appropriateness of the costume to the age and status of the wearer. A woman of seventy should not dress like a girl of seventeen.

The other phases of this division of conduct besides those manifested in dress have to be considered. The first of these is the demeanour of the patient towards persons of the opposite sex. This may be indifferent, or attentive in various ways. If a man, he may be in the habit of dangling round every woman he sees, without any suggestion of impropriety or any exaggeration save that of compliment. If a woman, she may openly and persistently endeavour to attract every man. In either case the tendency may be manifested with or without selection of the

more favourable specimens of the other sex ; or the attentiveness may be accompanied by manifest improprieties of speech or gesture, or even by downright indecency, to the point of revolting bestiality.

The next practice to inquire into is the extremely common one of masturbation, with regard to which nothing need be said except that at no age does it appear to become evanescent in some patients.

The demeanour of patients towards their children, and the demonstrativeness of their affections especially towards their young children, who cannot have been concerned in the transference of the patient to the asylum, are matters for record. This is a phase of conduct which varies much, however, within the limits of the normal.

In this place may be conveniently mentioned the demeanour of the insane towards children not their own. An inclination to notice, and more or less to pet and caress, children of tender years is universal in women, and very general in men after thirty, and especially in those who have for long been deprived of the sight of children and the sound of children's voices. The neglect of a female patient in an asylum to take notice of a child on opportunity occurring, would indicate great deprivation of mind. In many cases the society of children exercises a most salutary influence on the insane.

Social and Political Activities.—The *fourth* division of conduct includes the acts by which proper social and political relations are maintained, and is the most important and the least easy to investigate. Under the head of social conduct falls the relation which the patient maintains towards his fellow-patients, and under political conduct may be considered his relation towards the only governing powers with which he has to do—the authorities of the asylum.

In the lowest stage of social degradation, patients take no heed whatever of their associates. If intelligent enough to find their own way from place to place, they regard their fellow-patients merely as obstacles to be avoided during their progress. Every form of communion with them is quite wanting. Having regard to the deeply fundamental character of the social craving—the longing for contact and intercourse with his fellows, which is so characteristic of man, as of all gregarious animals—this extreme degree of deprivation of the social instinct indicates a great depth of dementia. Above this low level of sociability there is every degree of appreciation of the presence of others, and of the duties that their presence demands. Some patients will with complete unconcern revolt the feelings of those around them by displays of indecency, and by disregard of the most fundamental conventionalities of civilised life. They will exercise in public, without compunction or hesitation, those functions, excrementitious and sexual, which are by common consent concealed from the world. They will gobble their food filthily,

using only their fingers as a vehicle. They will expose their persons, slobber over their clothes, spit, &c., without the slightest regard to the feelings of those around them. Others will make themselves objectionable by hideous noises, and in other ways.

Among the better class of patients some sociability prevails. They will talk together, will work together, join in recreations, and treat each other with respect and forbearance. That benevolence in little things which is the essence of politeness is, however, rare in the insane, and the reason is not far to seek. It is one of the latest accomplishments to be acquired, and is therefore one of the least deeply ingrained, and one of the first to be lost when mind is deteriorating. True sympathy, though certainly not unknown, is certainly very rare among the insane.

With loss of the social faculty, perversion is by no means uncommon. The most frequent form of perversion is quarrelling, and this tendency is, it must be confessed, largely favoured by the closeness with which the insane are often aggregated together in asylums. When people are so thick upon the ground that they cannot move freely without jostling one another, it is impossible to prevent occasional quarrels. The degree of proneness to quarrel, which may be measured by the frequency with which any individual is involved in quarrels, is, however, an important matter to record, and should be noted in the Case-Book by the medical officer.

An important matter to note is whether the quarrelsome tendency expends itself in words or whether there is a tendency to violence, and if the latter, how and when the violence is displayed and towards whom. Some patients will habitually attack in the same way, some will always kick, others strike with the fist, and others with a weapon, others again with a missile. Some patients are violent only or mostly on rising in the morning, others after food, others before or after their fits. Some patients will have an aversion to, and exert violence towards, those only who are strange to them; others to those who display a particular colour in their dress; others towards women, others to those who are not likely to retaliate, others only towards persons in authority, &c.

Another perversion of the social faculty, which is very common, but which has but few opportunities of indulgence in asylums, is thieving. There are but few lunatics who are not thieves upon occasion, but in asylums the occasions are so few that the tendency is for the most part overlooked.

The relation of the patient to the authorities of the asylum is, it must be confessed, chiefly a matter of management. The great majority become very amenable after a short time, but now and then a patient will be found who is by nature a rebel, and who is for ever at war with the controlling power, be that what it may.

5. The fifth division of conduct is that of **Religious Observance**, with regard to which there is not much for the medical officer to record. The only important matter to note is whether the attention to religious observances is excessive.

6. The sixth and last division of conduct comprises the **Recreative and Æsthetic Activities**, which also do not call for much remark, except in special cases, in which the matter for comment obviously presents itself.

Lastly, a very important point to observe and record is the *proportion* in which the total activities of the individual are distributed among these several divisions of conduct. Human activities do not admit of being precisely measured, nor can their proportions be estimated with accuracy, but nevertheless it is possible to attain a very certain judgment as to whether this man is more active and energetic than that, and similarly, though the standard is not sharply defined, yet certain broadly drawn divisions are recognised as fitting and normal in the distribution of activity over the various fields of conduct, so that no one division shall absorb an excessive proportion, and all shall have their share.

When conduct *in toto* is deficient, it is not equally deficient in each department. As has been several times insisted, the more elaborate and complex forms of conduct are the first to be lost; and the simpler and more fundamental remain the latest. The same law obtains within each division. So that we find that, in a gradual deprivation of sanity, the social activities are the first to be lost, and the activities necessary for livelihood go next. Since therefore in no case are the activities equally diminished in every division, there is a certain disproportion in every case of failure. Often, however, a case presents a mixture of defect and excess. For instance, it is common for a patient to devote little or none of his energy to remunerative occupation, but to expend a great deal in recreation or in religious observance. The disproportion will be obvious and should be recorded.

MIND.

To traverse the whole mind of a patient, and determine where and how it is defective or disordered, and to record in plain terms the nature and amount of the defect or disorder, is no easy matter. When the alteration is an alteration of kind, as in the case of an hallucination or a delusion, the matter is indeed simplified; but when it is a mere alteration in degree, when the mind is simply defective, then it is very difficult, and for the obvious reason that there is no fixed standard of health by which we can measure any defect that exists. Moreover, it is never to be forgotten that the standard of mental capacity necessarily varies with every case, that which is normal for one being defect in

another. Sanity is the normal performance of the process of adjusting self to circumstances; and as no two selves and no two sets of circumstances are precisely alike, the sanity of no two people requires precisely the same quality of mind. Still, if we bear in mind this definition of sanity, and take into account the circumstances of the individual as well as the individual himself, we shall find that there is a standard, not indeed exactly fixed, but broadly marked, by which we may estimate the amount as well as the quality of a person's intelligence.

The first simplification of the task is to separate Thought and Feeling, and to investigate separately each of these factors of mind.

Feeling.—The most important datum to determine with regard to feeling is whether it is, on the whole, pleasurable or painful, or indifferent; or, in other words, whether the patient is in a state of exaltation or depression, or in that neutral condition which is in most persons at most times the usual and normal one. Having determined this fundamental question, the examiner next separates the sensations from the emotions, and proceeds to investigate the former. The questions for determination are (1) whether actual impressions are normally received and interpreted; (2) whether sensations occur without the provocation of external stimulus—in other words, whether there are hallucinations of the senses.

As to the first question, it is not contended that there is any necessity except in special cases for testing the senses of the bulk of patients in asylums, nor if it were so contended is there any chance of such tests being applied. The medical officer should, however, record any conspicuous defect, as deafness or blindness, that may be present. Hallucinations and illusions should, however, be carefully inquired for in every case in which there is sufficient mind left to render their existence possible. Of course, these are in part intellectual defects; but they may nevertheless be conveniently considered here.

Neither is it practicable in every case to traverse the whole range of the emotions, nor, if it were practicable to make the inquiry, could any determination be arrived at in the great majority of cases. The case-taker must content himself with remarking the conspicuous absence, or presence in excess, of any particular emotion; those which are most likely to be absent being of course the more elevated, as justice, duty, sympathy, and humour, while those which are likely to be in excess are the lower, as the sexual emotions and the emotions of antagonism.

Thoughts.—The power of thought has to be tested in three aspects:—the power of reasoning, the power of remembering, and the power of perceiving. It should be remembered that the power of reasoning does not necessarily mean the power of *abstract* reasoning, and that to test a patient's capability in this respect it is not necessary to set him a

problem in algebra, nor even to require him to solve a sum in arithmetic. Reasoning is performed whenever a person brings into comparison two states of mind that have never been brought together before, and determines on their likeness or unlikeness to each other. The elevation of the reasoning depends partly on the *complexity* of the states thus brought into comparison, and partly in the *novelty* of the conjunction ; that is to say, the wideness of the interval that previously separated them. The *correctness* of the reasoning depends on whether the judgment of likeness or unlikeness arrived at corresponds with a true likeness or unlikeness of the things that the state of mind represent.

The complexity and originality of reasoning have very little to do with the question of sanity or insanity, and may to a large extent be neglected by the case-taker. It is well to know broadly whether the patient is clever or no ; but it is only when the defect of these qualities becomes very pronounced, becomes so great that it actually interferes with the gaining of the livelihood, that any formal investigation with respect to sanity is needed. When, indeed, a person is unable to judge that a carriage which is coming straight at him is likely to injure him unless he gets out of the way, his simple defect of reasoning power is so great as to amount to idiocy ; and when he is unable to reason that, if he sells a commodity at a less price than he gave for it, he will lose by the transaction, his defect amounts to imbecility ; but, granting that he possesses sufficient reasoning power to enable him to perform the simple judgments necessary for the earning of his living, he is not to be considered insane for any deficiency in the powers of mind above and beyond this. Any imperfection of reasoning in this more elevated sphere must, in order to characterise him as insane, be of the nature, not of simple defect, but of disorder.

Disorders of reasoning are of two varieties. Reasoning is the establishment in the mind of a new relation between mental states, and this relation between the mental states should correspond and be adjusted to a similar relation between the things that the mental states represent. For example, a patient, seeing a man in the distance, infers that the man is a policeman who wishes to arrest him. Here the patient establishes in his own mind a relation of co-existence between the percept of the man and the concept of the powers and aims of the constable. If the man really is a policeman and really does desire to arrest the patient, the process of reasoning is not only normal, but correct. If the man is not a policeman, or if, being a policeman, he has no desire to arrest the patient, the reasoning is incorrect, and may be disordered. To determine whether it is simply a mistake or whether it is a delusion there is one test, and only one ; and that is to determine whether or no the patient has the power to *correct* it. If the parties are brought

together and the stranger repudiates the assertion that he is a policeman; or if, being a policeman, he repudiates the desire to arrest the patient, and goes about his business; and if the patient still persists that his reasoning is correct and that the man still desires his arrest, then this reasoning is not merely incorrect, but deluded. But if he accepts the correction and abandons his conclusion, then that particular conclusion was simply a mistake. It will be observed that this correction does not touch the deeper problem of the reason why the patient considered himself open to arrest. To determine whether this impression is a mistake or a delusion the same process must be gone through with the other factors. The patient supposes, for instance, that he has committed a crime, or has by political antagonism rendered himself obnoxious to the powers that be. If he have committed the crime, his reasoning is normal and correct. If the action that he considers criminal is either not criminal or has never been committed, he is certainly mistaken, and in the latter case is certainly deluded. The delusion in that case would be one of memory and not of reasoning. But supposing that he has done some act—say that he has put on his hat before leaving church or has committed a trespass, an act which is not criminal, but which he believes renders him liable to arrest, then the test of sanity is as before in the corrigibility of the reasoning. If, upon proof being adduced, he is convinced of his impunity, the matter is a mistake only; but if, after sufficient proof, he remains of the same opinion, he is deluded. It will be noticed that the relation between the states of mind may correspond with a relation which actually exists in his circumstances, although the mental relation is out of adjustment to that in the surroundings, or the mental relation may not have any corresponding relation at all in the environment. The attribution of the constabular power, which actually exists in some men, to a man who also actually exists, but is not a constable, is an instance of the former error. But if the patient imagines that the police are round the corner waiting to pounce upon him, when as a matter of fact there is no one there, the error belongs to the second category, and is a wider departure from actual fact.

As with reasoning, so memory may be either simply defective or subject to disorder. It is not possible to draw any definite line between the "bad memory" which is within the limits of the normal and the memory which is so defective as to be actually morbid. The normal variations of memory are very wide indeed. One physician will remember on occasion the name and the details of the malady of every patient that he has attended for years past, and of every important case that he has ever attended. Another must refer to his note-book for every fact of importance. One artisan will remember the detail of every job that he has executed for years; another will be unable after a

few months to recognise an article of his own make. Generally, however, there are certain memories which cling in the mind of every normal man, the complete loss or the great impairment of which will stamp the memory at once as abnormal. Every normal person has a fairly definite memory of the lapse of time and of the interval of time by which he is separated from the important events of his life. A man will remember the year in which he first earned his living, the date of his marriage, the age of his children, the time of leaving or changing his employment, the duration of a severe illness, and matters of a similarly important nature. He will remember the details of events that were important to him; of successes and failures. He will be able to retrace without error a route that he has traversed half a dozen times, unless it should be exceptionally puzzling. He will know the names of people with whom he has had much to do. He will remember distances that he has often traversed and places in which he has lived. If, in matters such as these, his memory is found to be manifestly defective and the error is great, such defects must be considered outside the limits of the normal. As is well known, the memory for recent events is usually lost before the memory for events long past; and events of the latter class may be well remembered even when memory for recent events is much impaired. Every one should be tested as to both classes of matter.

Disorder of Memory exists when things are wrongly remembered, or when there is a *quasi* memory of events which have never occurred at all. The first form of disorder is extremely common within normal limits. It becomes abnormal only when strongly marked, and when it is incapable of being corrected. If a patient remembers that he was brought to the asylum by a corporal's guard, when, as a matter of fact, he was brought by a relieving officer and a policeman, the error is of the former class. If he remembers that he has had an interview with the Queen, and been created Prime Minister, when as a matter of fact no such interview has taken place, the error is in the latter category. It is important in case-taking to distinguish clearly between defects and disorders of memory and defects and disorders of reasoning. In nearly all cases disorders of memory are lumped together with disorders of reasoning, the whole being denominated delusions; but it is evident from what has been said that there may be delusions of reasoning and delusions of memory, and that the two forms of disorder are distinct.

Errors of perception are divisible, in the same way as those of reasoning and memory, into defect and disorder; the disorder is similarly two-fold, and the test of the sanity or insanity of the error is the same.

To *perceive* a thing is not merely to *see* it. Perception implies the association in the mind of the attributes which a thing has previously been found to possess with its present appearance. Thus, a man may

see a stinging nettle, but if he do not associate in his mind the attribute of the power of stinging with the appearance of the plant, he does not *perceive* that it is a stinging nettle. So he may see a man in front of him ; but if he do not associate in his mind the attributes which he is familiar with, as pertaining to his brother, with this appearance, he does not *perceive* that the man is his brother. To judge that perception is defective we must therefore know that the patient has had opportunity beforehand of becoming familiar with the attributes of the thing which we expect him to perceive. It would be no defect in a day labourer to be unable to perceive that the characters in a book were Hebrew, though it would be a defect of perception if a Hebrew Rabbi were unable to do so.

Disorders of perception are of two kinds. The one is when a person attributes to an appearance qualities which the thing so appearing does not possess, as, for instance, when a patient perceives a harmless cat to be a tiger, a wreath of smoke to be a twining snake, or a benevolent assistant medical officer to be a bloodthirsty murderer. The other disorder of perception is when a patient perceives an object in a place where no object exists. The first disorder is known as illusion, the second as hallucination.

For investigating very low orders of intelligence, a useful aid is a number of eubes, oblongs, hexagons, balls, cylinders, and cones, made of wood and painted in different conspicuous colours. The intelligence of the patient can be tested by requiring him to select from the number before him, first those that are alike in all respects, then those that are alike in form only, then those that are alike in colour only, then those that have curved surfaces, and so forth. In this way a complete series of simple tests of gradually increasing difficulties can be arranged, and the intellectual position of the patient precisely ascertained. By very simple modifications which will readily occur to the operator, the test may be extended to the memory.

Methods.—It is unnecessary to say that in taking his first notes of a case, the medical officer must take his case-book into the ward, sit down by his patient, and devote a considerable time to his business. In the subsequent keeping up of the case various methods are pursued. The following is the best. The medical officer should take a note-book with him in his visits to the wards, and should enter therein the names of those patients in whose cases anything worthy of record has occurred. On his return from the ward he should *every day* take out his case-books and transfer to them from his note-book the records that he has accumulated. Unless this duty is performed daily and regularly, the case-books will not be properly kept. These notes will refer chiefly to matters of bodily illness, casualty, &c. In addition to this, the medical officer

should periodically take his case-books into the wards and go systematically through them, having each patient brought before him in succession, and entering up any changes that may have taken place in their condition since last note. *In these notes he should be careful to enter such facts as shall make it appear plainly that the patient is insane*, and is fit to be still detained. The continual recurrence of the expressions, "Remains the same," "No alteration," &c., is much to be deprecated. Few patients remain quite the same for long periods together, and close inquiry should be made as to improvement or deterioration in habits. Removals from ward to ward, and the reasons for them, should be chronicled. The continued existence of delusions, their diminution or multiplication, should be recorded. The rules issued by the Commissioners require a record to be made once a week for the first month, afterwards once a month in recent or curable cases, and in chronic cases subject to little variation once in three months. The medical officer must, however, look upon these periods, not as an absolute guide or instruction, but as a minimum below which he must never fall. Too often they are looked on as a maximum which need never be exceeded. The case-books should be taken into the wards, and the patients systematically examined once a month. Entries in very stationary cases need not be made quite as often as this, but this is none too often to examine the patients and ascertain whether any change is taking place in their condition. A good plan, and one that I have myself followed, is to have a special case-book for cases of scientific interest which require reporting at great length. Such cases are thus kept together conveniently for reference, and the greater space that they occupy does not interfere with the arrangement of the other books.

Among the matters entered in the case-books should be the results of periodical weighings of the patients. Every patient should be weighed not less often than once a quarter—once a month is better—and the weight recorded and compared with that of the previous weighing. Any marked discrepancy should lead at once to a physical examination of the patient.

The *post-mortem book* should be fully kept. It is unnecessary here to give the full directions for making and recording post-mortem examinations, such as are to be found in every text-book of pathology; but certain special points need to be insisted on which are of particular importance in asylums. The presence of bed-sores is one of these. It is an indication of negligence or ignorance in the nursing, and the observation and record of bed-sores at the post-mortem examination is a valuable check on the attendants. The thickness of the calvarium should be *measured*, and the exact measurement recorded in fractions of an inch. Calipers should be used for this purpose, accuracy being impossible with

a straight rule. The ordinary carpenter's caliper will do, though of course greater accuracy would be given by a graduated or micrometer caliper. These instruments are expensive, the cheapest reliable form being about sixteen shillings. As, however, they can be used for other measurements, and measurements are constantly required, a good caliper ought to form part of the outfit of every post-mortem room. Of course, to be of any value as a comparison between one calvarium and another, the measurement should be made as nearly as possible at the same spot in each. A convenient place to choose is one inch above the middle of the orbital arch, this being a position which is usually divided by the saw.

It is impossible to insist too strongly on the importance of expressing every magnitude in figures as far as it is practicable to do so. Weighing and measuring are at the root of all science, and only by weighing and measuring can exactness be attained.

The fragility of the ribs should in every case be tested by the instrument devised by the author for that purpose. A little more than four inches of the eighth rib on each side should be removed for the purpose. The rib should be placed on the prongs of the machine with the costochondral articulation flush with the outer surface of one of the prongs. Care should be taken that the stirrup is exactly midway between the prongs of the machine. One rib should be broken with the concavity against the stress of the breaking pull, the other with the convexity towards the screw.

The assistant medical officer, or one of them, has charge of the surgical instruments and drugs.

Care of Instruments.—Surgical instruments of bright steel which remain unused—for it may be months together—are apt, when at length required, to be found rusty. To prevent this, the drawer or cupboard in which they are kept should always contain an open box of proportionate size, two-thirds filled with quicklime. In a moderately dry place the lime will not require renewing oftener than once a year. If the place in which the instruments are kept is damp, it should be changed. If a dry place cannot be found, they must have all steel parts smeared with a mixture of lard 7 oz. to rosin 1 oz., melted together and well stirred, or camphor $\frac{1}{4}$ oz., lard $\frac{1}{2}$ lb., similarly treated. Each of these compounds may be sterilised by the addition of a small quantity of corrosive sublimate.

Instruments should be looked over once a month. If any are found to be rusty, immerse them in an aqueous solution of cyanide of potassium 1 in 4, then rub with a paste made of equal parts of cyanide of potassium, Castile soap and whitening, rubbed in a mortar with enough water to make a cream.

All the instruments necessary for tracheotomy should be kept together

in one place separate from the rest, so as to be available at a moment's notice in case of a patient choking.

A pocket-case should always be kept in the instrument drawer, ready furnished with artery forceps and silk for the arrest of bleeding. It should also contain needles, sutures, and the usual contents of a surgical pocket-case.

The stock of drugs should be gone through once a quarter in small, once a month in large asylums. First go through the stock in the dispensary, and write down the names of all drugs that want replenishing. Then go through the stock in store, and strike out of the list all of which there is a sufficient stock to replenish the dispensary until the next period comes round. At the same time add the names of any drugs of which there is an insufficient quantity in store. Take the list thus compiled and compare it with the last invoice, regulating the quantities requisitioned for according to the quantities previously supplied; and taking into consideration whether these quantities were sufficient or no. When the assistant medical officer is also dispenser, he will find it a great saving of labour to dispense those medicines which have to be taken over long periods of time in 12 or 16 oz. bottles. Night draughts should always be dispensed singly; no attendant should have custody of several doses of draught, or he will be likely to succumb to the temptation of giving more than one dose without orders. Draughts should not be repeated by routine and as a matter of course, but the actual need for them should be investigated, otherwise they may be continued when they are no longer necessary or beneficial. Some patients have an actual chloral-habit established by the long-continued administration of night draughts. Care should be taken that bottles no longer required are not allowed to remain in the wards with odds and ends of physic decomposing in them. They should be returned to the dispensary, washed, and disposed for subsequent use.

Dispensing must be punctually performed at a set time of day, and completed by a certain hour, so that the time of the head attendants may not be wasted in waiting for the medicines, and so that the attendants generally may have the example set them of duties punctually performed by their superior officers.

Under no circumstances should stock bottles of black draught, castor oil, white mixture, aperient pills, diarrhœa mixture, or sleeping draught, be entrusted to the head or other attendants to be used at their discretion. Every dose of medicine ordered should be specially dispensed *ad hoc*, and given on the responsibility of the medical officers alone.

PHOTOGRAPHY.

Part of the duty of the assistant medical officer is to render his case-book complete by inserting in it photographs of the patients at various stages of their career. On admission every patient should be photographed. As for the details of photographic methods, they are to be found in any of the numerous handbooks that are published on the subject. All that is necessary to explain here are the special points that have to be attended to in photographing the insane for the purpose of the case-book, and certain details that are not usually given in the handbooks.

The studio, or room in which photographs are taken, should be built against a north wall, glazed with glass that must not be green or yellow, but, if anything, of a bluish tint. The ends of the studio should be protected from the morning and afternoon sun, but the middle portion of the roof and the north side may be wholly of glass. Blue curtains should be provided, and so hung that any portion of the light at pleasure can be cut off. White screens should also be provided for the purpose of reflecting light when necessary to prevent the shadowed side from being too dark.

The sitter should be placed not directly under the skylight, for the vertical light will make glossy hair look grey, and will throw heavy shadows under the nose, eyes, and chin. The best position is under the dark portion of the roof just a little back from the skylight. The portrait should be taken in three positions—full face, profile, and three-quarter face, the sitter looking away from the side light.

In taking photographs for purely scientific purposes it is of course unnecessary, and would be inappropriate, to provide ornamental backgrounds, &c., for the sitters. All that is required is a plain screen of canvas on a framework of wood about 7 ft. 6 in. by 5 ft. The framework being made, the corners halved together, not mitred, wet the canvas, wring it out well, stretch it tightly, and tack it to the frame.

The screen thus made should be coloured by the following composition :—

Take $1\frac{1}{2}$ oz. glue. Break it small and dissolve by soaking for 48 hours in cold water. Mix 1 lb. whiting thoroughly with 2 quarts water, add 4 oz. or rather less of blue, and then gradually add 3 oz. lamp black, testing from time to time by spreading some of the mixed colour on paper and drying, till the proper shade is attained. Then add the glue. Strain through canvas, and spread on the screen with a large whitewash brush.

When taken, the negatives should not be retouched. One print of each position should be fixed in the case-book. The following is a good paste to use for the purpose :—

Dissolve 4 oz. glue, broken in small pieces, in enough water to cover it. After 24-48 hours boil the solution, and, while boiling, add 1 oz. wheat starch, beaten into a paste with cold water. Boil the mixture till quite thick. When required for use, dissolve in warm water.

The dark room should not be too small. There should be room to move about freely. It should of course be fitted with a sink with hot and cold water laid on; should be warmed with hot-water pipes and well ventilated. In order to keep dust from the lips of the bottles, which would of course be very injurious to the photographs, the stopper of every bottle should be covered with a little conical paper cap, twisted up in the way that grocers twist up their papers for sugar.

Difficulty is often experienced in pasting the photographs into the case-book so as to get them to lie flat. Usually they expand on being wetted, and, being pasted on in their expanded form, they shrink on drying, and so produce an unsightly cockling of the page on which they are fixed. To avoid this, the print should first be gummed at the back and allowed to dry. It should then be barely damped, not wetted, and affixed to the page, and should not be rubbed or smoothed, which causes it to expand, but may, if necessary, have a weight placed on it. When dry it will be found that both print and page are quite smooth.

CHAPTER XXVI.

THE CLERK.

THE chief qualities required in the clerk of an asylum are exactitude and punctuality. His duties are prescribed somewhat rigidly, and require only care and ordinary intelligence in their performance. Consequently there is little difficulty in obtaining an efficient person to fill the position.

The only duties of the clerk that need be here referred to are the

Statutory Duties.

These include the sending of certain notices, lists, and reports; making entries in the statutory books of the asylum, and keeping the accounts. The clerk is further bound by statute to "keep all books and documents which the visiting committee are required to keep or direct to be kept." The duties now to be enumerated are those only which are specifically prescribed by the statute or by the Rules of the Commissioners under the statute.

Documents to be Transmitted.

1. On the *admission of a patient* the clerk is to send a notice, in Form 7 of the Schedule to the Rules, within one clear day in the case of a private patient, and in the case of a pauper after two and within seven days, to the Commissioners in Lunacy. This notice is to be accompanied by copies of the reception order and accompanying documents.

2. Within *three clear days* of the escape, and of the recapture of a patient. After escape the clerk must send notice thereof to the Commissioners in Lunacy, and in the case of a lunatic "so found" to the Lord Chancellor's Visitors. These notices are to be in the Forms 12 and 13 of the Schedule to the Rules. As to what constitutes escape see p. 235.

3. Within three clear days of the removal or discharge of a patient, a notice is to be sent in Form 10 or 11 of the Schedule, as the case may be, to the Commissioners in Lunacy, and in the case of a lunatic "so found," to the Lord Chancellor's Visitors also. In the case of a pauper patient, it is usual, though not compulsory under the statute, to send a notice to the clerk to the guardians, or the clerk of the local authority to which the patient is chargeable also.

4. When the patient discharged is certified by the medical officer to be not recovered, and to be a proper person to be detained in a workhouse, a copy of this certificate must accompany the notice of discharge.

5. and 6. When a patient dies, two statements have to be prepared and signed by the clerk, within forty-eight hours of the death.

The first, which is to be sent to the coroner only, is in the form given on p. 234, and must be signed by both the clerk and the medical officer.

The second, which is in Form 14 of the Schedule to the Rules, and is signed by the clerk only, is sent in every case to—

1. The Commissioners.
2. The Registrar of deaths.

In the case of a pauper patient—

3. The relieving officer of the union or the clerk of the peace of the county or borough to which the patient is chargeable.
4. It is usual, though not statutorily compulsory, to send a similar notice to the clerk of the guardians.

In the case of a private patient to—

3. The relative named in the "statement" on admission.
4. The person on whose petition the reception order was made, or who made the last payment on account of the patient.

In the case of a lunatic "so found"—

3. To the Lord Chancellor's Visitors.
4. To the committee of the person. This is not a statutory requirement, but is usual and proper.

7. Within one week after the dismissal for misconduct of "any person employed in connection with the case of the patients," the clerk is bound to send notice of the dismissal and its cause to the Commissioners. It is usually understood that this obligation extends to the dismissal of attendants only, but it will be seen from the text of the Rule that it is of much wider application, and may be said to apply to every official on the asylum staff; for every one of them is employed "in connection with the case of the patients. Probably, however, the requirement will be satisfied if it is understood to apply to those who have direct relation with the patients, and not to officials such as, for instance, stokers or labourers, or housemaids whose connection with the care of the patients" is indirect.

The Commissioners also require, although this requirement is not included in their Rules, and has not, therefore, the force of the Statute, that notice be sent to them of the engagement of every attendant, and of the termination of his engagement, whether voluntary or otherwise.

8. Twice a year, within fifteen days of the first of January and the first of July respectively, the clerk is to send a list, made up to that date, of all pauper lunatics then in the asylum in Form 15 of the Schedule to the Rules to—

- a. The Clerk to the Visitors.
- b. The Commissioners in Lunacy.
- c. The clerk of each local authority to which the asylum belongs.

9. Twice a year, viz., within fifteen days of the same dates, a list, made up to those dates, of the full names of all private patients then in the asylum, with the dates of their admission in Form 16 of the Schedule to the Rules, to the Commissioners in Lunacy.

10. At the same time a return of the *number* of private patients of each sex to the clerk of each local authority.

11. Within three days after each visit of one or more of the Commissioners the clerk is to send a copy of every entry made by him or them in any of the books of the asylum to the office of the Commissioners. The only book in which the Commissioners usually make entries is the Visitors' Book.

Entries in Books.

The Statutory Books which are ordered to be kept by the clerk are as follows :—

1. The Register of Patients (except the “ form of disorder ” column).
2. The Register of Removals, Discharges, and Deaths.

If the asylum receives private patients, separate registers must be kept for this class of patients.

The entry in the Register of Patients, on the admission of a patient, is to be made “ immediately on the reception of a patient,” not even the “ one clear day ” usual in other cases being permitted to elapse before it is made.

On the death, discharge, or removal of a patient an entry is to be made in *both* the Registers, and in this case the clerk is allowed three clear days in which to make the entries.

The only book which the visitors are “ required to keep,” and for which the clerk to the asylum is therefore responsible by statute, is the Visitors’ Book. He is not, however, required to make any entries in it, unless at the dictation of the visitors, and his “ keeping ” of it must be interpreted to mean keeping in safe custody.

THE STEWARD.

The duties of the steward vary very much according to the size of the asylum and to the share of the steward’s duties which is performed by the medical superintendent. In some asylums the whole of the proper duties of the steward are divided between the medical superintendent and the storekeeper ; but this is not an arrangement that can be commended.

The steward is the superintendent of the whole of the *materiel* of the asylum. He is responsible for the maintenance in good repair of the fabric and fittings of the building and of the furniture ; for the decorations ; for the whole of the supplies of food, clothing, fuel, and other stores ; and for the efficiency of the drainage, ventilation, heating, and lighting of the establishment. His office is, therefore, one of the highest importance and responsibility, and the man chosen to fill it should be one of wide experience and of proved integrity. In large asylums he is very commonly independent of the superintendent, and reports directly to the committee, and in such cases he need be a man of much tact and *savoir faire* to avoid friction and disputes as to jurisdiction.

It would be obviously inappropriate to enter in this book minutely into all the duties of the steward, since such a course would necessitate

a complete treatise on the maintenance and repair of buildings, as well as on drainage, ventilation, &c. They do not differ from those of the 'steward's or house-governor's of other large establishments except in the considerations that have to be borne in mind in dealing with structures and materials intended for the use of insane persons, considerations that have already been dealt with in previous sections of this book.

THE MATRON.

The matron has the control of all the female staff, and is also responsible to a large extent for the welfare of the female patients. In the female staff are included not only the female attendants, but the laundry-maids, the needlewoman or workmistress, and the cooks; and hence the matron has to exercise a supervision over the laundry, the workroom, and the kitchen. She has also charge of all the stock in the female wards.

The dangers that a matron has specially to guard against are jealousy of her subordinates and unfairness in her treatment of them. Women do not usually appear so favourably in positions of authority as men do. They are much more apt than men to show favouritism towards some of their subordinates and spite towards others. They have a less cultivated sense of justice, and are more swayed by personal motives, so that the great difficulty that a matron has is to regulate her treatment of her subordinates according to the manner in which they perform their duties, and not according to her own personal likes and dislikes. Like the other officers in asylums, the matron is apt to get an exaggerated idea of her own personal importance, and to require an amount of deference from the female staff which is out of proportion to her position. She must, of course, maintain her position, and when necessary assert her authority, but it is quite possible to do this without exacting a humiliating deference from her subordinates. If she does so, the consequences are sure to recoil unpleasantly upon herself. The other officers will be quick to notice any undeserved slight or undue harshness that she may be guilty of, and they will make their resentment felt in ways that cannot be complained of, and that are very disagreeable.

The supervision of the matron over the female staff should be as minute and continuous as it can be without descending to petty and worrying interference. It is usual for the matron to walk through the wards once a day, and to consider that single visit to be an efficient discharge of her supervisory duties. This, however, is a very perfunctory course. Her visits should be frequent, should be at unfixed times, and should be at all hours, so that she may exercise a real practical influence in keeping her subordinates up to their work, and so that she may keep

herself thoroughly conversant, by personal observation, with all that is going on, and may not require to depend on the reports of others.

She should see that those of the female servants and staff who are not under the supervision of the head female attendant are on duty at the proper time in the morning.

She should spend much of her time in the kitchen when the meals are being prepared; should see the meat, &c., received from the stores, and check the amounts to see that they are correct; should take care that the meals are properly cooked and served for patients, attendants, and officers; and should visit the scullery during washing-up time, both to see that the cleansing is properly done and to check breakages.

She sometimes takes the stock in the female departments of the house.

She should daily inspect the sleeping-rooms, mess-room, and club-room of the female attendants, and see that they are kept tidy and comfortable.

She receives from the steward the material for the dresses of the female patients and for the underclothing of both sexes, gives it out to the workmistress, superintends the cutting-out and making-up, and returns the garments thus made to the stores.

She is responsible for the cleanliness of the female wards, dormitories, and adjoining offices, and should see that they are properly cleaned and dusted, and neatly arranged and kept. The places most apt to be neglected are the ledges above the doors, the window frames, the tops and backs of pictures, the turned legs of chairs, &c., the corners of stairs, and every obscure out-of-the-way corner. She should lift the ends of carpets and mats, to see that the dust has not been swept under them and left there.

In many asylums a housekeeper is kept, who performs the major portion of the above duties, and when this is the case the matron has little to do except to walk occasionally through the wards and to dress becomingly.

Patients.—The matron should see that the dress of the patients is neat and tidy, and that every effort is made to improve their habits and to induce them to undertake employment. She should notice particularly that their hair is tidy and their heads clean. Dirty hair communicates an unpleasant sticky feeling to the hand which is not easily forgotten. She should see that the clothing that the patients are wearing is sufficient. Elderly people, especially when demented, are very susceptible to cold, and a very large proportion of such patients die of inflammation of the lungs. Hence it is very important that they should be kept warmly clad both by day and by night, and that the wards in which they live should be maintained at a proper temperature, 55° to 65°. The matron

should notice whether the patients' boots are kept fastened, and whether their stockings are properly gartered or allowed to fall about their heels. She should notice whether any of objectionable habits are left unchanged. She should take care that the strong and healthy patients are not allowed to congregate about the fire, to the exclusion of the weak and infirm. In the airing courts she should notice whether patients are allowed to sit about on the ground, and should see that those nurses who have to exercise the patients requiring this attention are doing their duty, and not sitting down in secluded corners. She should see that the nurses are properly dispersed over the airing court, so as to keep all the patients under supervision, and are not congregated into one group and gossiping.

THE ENGINEER.

The department of this official is the most important of all as far as the daily and hourly working of the asylum is concerned, and the man chosen to fill the place should be thoroughly competent and experienced in all branches of engineering work. He should understand thoroughly the fitting and working of steam and hot-water boilers, hot-water circulation, steam-engines and machinery, cooking apparatus, heating, ventilating, and all sanitary work. In many things it will be necessary to make the other artisans work up to the requirements of the engineer, and it is a good arrangement, if he be as good a man as he ought to be, to place him in authority over them all.

The engineer should always reside on the premises and near his engine-house, for he may at any time be required to be on duty at a moment's notice in the case of an outbreak of fire.

He should be the head of the fire brigade, and should be responsible for the whole of the apparatus being kept in perfect order and ready for instant use, and for the instruction of the attendants and the rest of the staff in their duties in this regard.

To him also falls the keeping in proper repair and in working order of all mechanical appliances throughout the building, including the locks, the lavatories, baths, and closets, the water supply, lighting and heating apparatus, the machinery in the laundry, kitchen, shops, and elsewhere, the pumps for water, and, where used, for sewage, the drains and sewers, the irrigation plant, and everything whose working depends on moving parts.

He will be responsible for keeping records of the gas and water meters, and should keep a daily consumption book, in which he should record every morning the consumption in each ward or block as the case may be, according as they are fitted (see pp. 17, 20). In this way a very severe check is kept upon the charge attendants, as any undue waste of gas or

water can not only be immediately discovered, but can be localised and brought home to the official who is responsible for it. It is difficult to lay too much stress upon the importance of this measure, for the waste of both gas and water in most asylums is very great, and the only effectual check upon this waste is a daily record of the consumption in every section, each section being made sufficiently small for one person to be responsible.

He should make a daily visit to every part of the asylum, examining the locks, water-closets, lavatories, baths, sculleries, hot and cold water supply, heating apparatus and ventilating flues, making an immediate entry in his memorandum-book of every repair required. On his return to his office he enters these in his repairs book, which is sent to the steward or to the medical superintendent where that official undertakes this portion of the steward's duties, for ratification, and when the ratification is given he proceeds to carry out the repairs.

Every night at ten the water supply to lavatories, baths, and water-closets adjoining the day rooms, or used only by day, is to be shut off, and at six in the morning is to be turned on again.

Every six weeks he should see that all chimneys in use are swept.

Every drain should be flushed once a week. An efficient method of performing this automatically is to allow the water from the baths to discharge into a tipping basin or flush tank, and it will be the duty of the engineer to see that this apparatus is kept in order.

Out-of-the-way things, which are apt to become useless from neglect, should be periodically and regularly seen to by the engineer.

He should see that the grease traps are cleaned out once a week.

He should see that movable cowls to chimneys and ventilating shafts are kept lubricated, or they will soon cease to be movable.

The gutters should be cleaned, and the wire cages over the mouths of stack pipes examined, four times a year—at the end of September, November, January, and March.

THE HEAD ATTENDANTS.

The function of the head attendant is to supervise the attendants, to see that they do their duty, and in all minor matters, not provided for in the rules or in the instructions of his superior officers, to apportion to the attendants their several duties. In addition, he acts as a means of communication between the medical officers and the attendants, carrying the orders of the former to the latter, and the reports of the latter to the former.

It is obvious that the post of head attendant is an extremely responsible one, and should be occupied by a person of considerable experience,

of tried value, and of sterling worth of character. It should therefore be a well-paid post. On the efficiency of the head attendant more than that of any other official depends the good conduct of the attendants and the general well-being of the patients.

The supervision of the attendants by the head attendant is carried on entirely by inspection. He ought to be continually in the wards during his hours of duty, and completely conversant with all that goes on in them. This he cannot do unless there is some reasonable limit to the number of patients and of attendants under his charge. Where the wards are very large he can supervise more, and where they are small the number under his care must be reduced. In wards of average size about three hundred patients is the outside limit of the capacity of a head attendant to supervise efficiently. This should give him from five to ten wards, which is quite as many as he can visit with the frequency that is necessary if his supervision is to be efficient; and no ordinary man can bear in mind the names and cases of more than this number of patients, changing with the frequency that they do.

The head attendant should, of course, have served his time as ordinary and charge attendant, and should be the holder of a certificate of competency. He should have been instructed in first aid to the injured and in ambulance practice. Unless he is thoroughly acquainted with the duties of the ordinary attendant, his supervision will of necessity be perfunctory. He should possess sufficient tact and *nous* to be able to deal with the attendants, and to keep them up to their work without unnecessary severity, and without too frequent interference, and should be kind and sympathetic towards the patients, and able to gain their confidence.

He is responsible for seeing that all the duties of attendants laid down in the "Attendant's Companion" are properly performed, including both the care and management of the patients and the cleanliness and order of the wards. For the enumeration and description of these duties the reader is referred to the book above mentioned.

He is to be present at meal times in the dining-hall, and to see that the patients are properly served. He is present also at chapel and at the entertainments, and, most important of all, he must always be present at the general bathing of the patients. He is present also at the admission and at the discharge of patients; makes, on their admission, a list of their clothing and personal effects, hands them over to the relieving officer, and takes a receipt for them.

At night, when all are in, he master-locks all the communication doors between his own and other divisions, and the first thing in the morning he unmasters them.

The first thing in the morning he collects the reports from the night

attendants, and places them in the superintendent's office; and in the evening he collects those of the day attendants, makes out his summary of them, and deposits them in the same place.

He makes out the rota of attendants for half-day and whole-day leaves, and states on the list the names of those who have been late in returning at night, or in coming on duty in the morning, or who have broken other rules of the institution.

He reports immediately to the medical officer every case of injury to a patient—every fall, blow, and struggle—and every sudden illness or marked change in a patient.

In case of the death of a patient, he superintends the laying out of the body and its removal to the mortuary.

The head attendant rises at the same time as the attendants, and his first duty is to go round the wards at the hour at which the attendants are expected to be on duty, and to see that all of them are out of their bedrooms and in the wards, at the same time taking the master-locks off the doors. They should be careful to go round every day in a different direction, and to take each day a different ward first. If he goes every day the same round, the attendants in the ward last visited will know that they need not be on duty until five or ten minutes after the others, and will probably act accordingly.

Having been this first round, the head attendant then remains in the wards, passing through them and remarking the manner in which the patients are got up and washed, paying special attention to the special cases, to new admissions, to the sick, to the acutely maniacal, to the feeble, paralytics, &c. At the same time he interviews the night attendants and receives their reports, both verbal and written, and sees that the dormitory windows are thrown open.

At 7.30 the head attendants go to breakfast, and at eight o'clock are back in the wards to see breakfast given to the patients. When this is over, they supervise the cleaning of the rooms until nine o'clock, when they must be at hand in case of being summoned to give information to the superintendent and other medical officers. They will first see the working patients despatched to their duties.

At 10.30 they accompany the medical officers on their rounds, and at one are present in the dining-hall to see the dinners served.

At 1.30 they go to dinner, and in the afternoon occupy themselves in supervising the wards and airing courts, inducing the patients to employ themselves, &c.

At five o'clock they see the patients served with tea, and on bathing nights they bathe the patients at 6 P.M.

At ten o'clock they master-lock the communication doors.

THE ATTENDANTS.

The attendants are the backbone of a lunatic asylum. The happiness and welfare of the patients while they are in the asylum depend far more on the character and conduct of the attendants than on those of all the rest of the asylum staff put together. To the comfort of ninety-nine out of a hundred patients in the asylum the removal and replacement of the medical superintendent is a matter of no moment at all, in comparison with the removal and replacement of the attendant who has immediate charge of them. Upon the efficiency of the attendants depends hourly and momentarily the safety of the patients; upon the humanity and conscientiousness of the attendants depend hourly and momentarily the comfort, the happiness, the wellbeing of the patients. Without efficient attendants, the best superintendent that ever breathed is powerless to effect any improvement in his patients. With efficient attendants, an incompetent superintendent may find it an easy task to conduct an asylum without discredit.

Considering the manifest and overwhelming importance of securing efficient attendants, and considering, too, the peculiar, and in many respects the highly skilled, nature of the duties that they have to perform, it is a matter of wonder that until very recently there has been no systematic effort made to teach them their duties and to train them into the methods of performing those duties most efficiently. To the initiative of Dr. Clouston is due the first regular effort at training attendants. Before the stir made by him in 1880, attendants were simply turned into the wards and left to pick up a knowledge of their duties as they best could; precisely as the patients were often turned into them and left to recover or deteriorate as they were able. A systematic course of training is now in force at most asylums, and this is an immense improvement on the condition of things which preceded it. Attendants have an opportunity of learning the essentials of their business, and, having learnt them, of being examined in them, and receiving from an independent body—the Medico-Psychological Association—a certificate of efficiency. That the examination is open to the defects of other examinations, and is liable to become a test rather of readiness of assimilation than of practical efficiency, is a disadvantage not to be considered for a moment in comparison with the immense service that it renders in impressing upon the attendants that theirs is a skilled occupation, requiring study and application to learn, and demanding a knowledge that is capable of being tested.

There is another matter connected with attendants that, although it has received much attention, has not been dealt with nearly so success-

fully as has their want of knowledge. This is the difficulty of retaining them long in one place. How great the advantage to patients is of being dealt with and cared for by an attendant who knows them individually, is thoroughly acquainted with their fads, their peculiarities, their dispositions, and who has learnt by experience the best ways of dealing with them, is at once manifest without lengthened exposition. Nor does it need insistence to display the great detriment that it is to many patients to be perpetually transferred from the care of one attendant to that of another. In addition to these disadvantages, it is evident from the constitution of human nature, that when a man has given notice to leave his place, he will not, during the time that his notice is running out, have the same interest in his duties as if he were permanently settled in his situation. When, as frequently happens, one-third of the whole staff of attendants are changed in a year, it is as if the whole staff of the attendants were for four months doing their duty more or less perfunctorily, and without a proper and living interest in the way those duties are performed.

The speculations of superintendents as to the causes of these constant changes, and the reasons that they adduce in explanation of them, display a want of sympathetic appreciation of the lives of the attendants, and an ignorance of the motives of human conduct, which is very strange, and not very commendable. The common explanation is that attendants differ from other human beings in having a "double dose of original sin," at any rate of the vice of motiveless restlessness, which impels them without rhyme or reason to throw up comfortable and well-remunerated places, and to cast themselves adrift upon the world in the vague and uncertain hope of getting something better. We are asked to believe that attendants in lunatic asylums are so different from the rest of civilised human beings, that they prefer precariousness of occupation to certainty; that they have a positive distaste for comfort, for fixity of tenure, for prospects of advancement: and actually long for opportunities of being out of employment, of forfeiting the steps that they have already gained, and of beginning again at the bottom, at lower wages, and in inferior positions.

It has often been a matter of wonder to me why superintendents who bewail the perversity of their attendants in craving for causeless changes never put themselves in imagination into the position of the attendants, and realise what their lives are; never make searching inquiry to discover whether this caprice and waywardness have not after all some basis of reason at the bottom of it. Does a superintendent ever realise what it is to a man to have, day after day, and week after week, food that he cannot eat—to have his mutton raw, his beef charred to a cinder, his pies speckled with black beetles, his bread sour, his

cheese crawling with maggots, and his butter rancid? Does he ever realise what it is to lie night after night listening to the thundering bangs of a lunatic against a loose door? or the incessant raving and howling of a noisy patient in the next room to him? Does he ever consider the irksomeness of the hundred regulations, extending down to his most trivial actions, to which the attendant has to submit? He, the superintendent, knows what it is to be in occasional contact with the insane, and recognises the necessity of a frequent change for his own mental health. Does he ever realise what it must be to be continually immersed among the insane? and does he recognise how strong must at last become the craving for change, for congenial companionship, for freedom from responsibility, from the incessant vagaries of insane people? Does he ever ask himself why it is that in some asylums this unnatural restlessness among the attendants does not exhibit itself? Does he never consider that if it can be abolished in one, it can be abolished in another? How can a superintendent expect to retain good attendants in his service who, on hearing a complaint of constant broken rest from the noisiness of a patient, has the insolence to tell the complainant that he is paid to put up with it? To me the wonder is, not that attendants change their places so frequently, but that in some asylums any attendant can ever be found to remain longer than a month.

The remedy for the frequency with which attendants change their employment is manifest from the statement of its causes. It consists in the exercise by the asylum authorities of an intelligent and sympathetic interest in the attendants' welfare. Stringent precautions should be taken that their food is of good quality and properly cooked and served, and to this end it should be frequently inspected by the medical officers. The asylum cook is prone to think that anything is good enough for the attendants, and to prepare their meals accordingly. Of this notion she should be disabused. Patients who are noisy at night should always be set to sleep in a separate building, where their uproar cannot disturb the rest of the inmates. It is a terrible thing for a hundred or more of people to lose their rest night after night on account of the nocturnal uproariousness of a single patient. It is preposterous to expect that any man or woman can efficiently do his or her duty whose sleep is habitually broken and curtailed below the proper limit. The evil that such broken slumber produces is not limited to impairment of vigilance and of energy. It leads also to irritability and shortness of temper, and is therefore fruitful of friction among patients, between patients and attendants, and among attendants themselves. On every account, therefore, this most important point, of the provision of a separate block for the accommodation of noisy patients, should never be neglected.

The question of wages is of course of some importance, but it is of importance in attracting a proper class of persons to seek the position of attendant, not so much in retaining them when once they are engaged. It is, of course, eminently desirable that attendants should have something to look forward to—some hope of attaining to better things. If we are to attract to, and retain in, asylums a really satisfactory class of persons as attendants, we must make them understand that in entering the asylum service they have a career before them; and hence a graduated scale of wages and a hierarchical arrangement of posts should be provided. It should be clearly evident to every probationer on entering, that he or she can ensure, by steadiness and good conduct, the attainment of a position at least equal in comfort and affluence to that which they could look forward to in any other walk of life for which their previous education and their mental and physical capabilities render them fit. If this is done, and if the other matters here insisted on are provided for, we shall cease to hear the perennial and monotonous complaints of the restlessness and love of change that prevail among attendants.

In order to compensate for the rigidity of the regulations to which the attendant has to submit in the course of his duty, every possible elasticity should be introduced into those regulations that admit of such treatment. For instance, attendants are allowed in every asylum a certain amount of leave, but the conditions under which the leave is granted are fixed with a needless rigidity, and are seldom modified, as they might easily be, to suit the convenience of the attendants. An attendant is allowed, as a rule, an afternoon every week and a day every month. This afternoon is fixed for a particular day in the week, and must not be altered. Supposing that one day in the week is market-day in the neighbouring town, every attendant in a ward, save one, is for ever precluded from witnessing the noise and bustle, the concourse and excitement, of the market, and the one who has got tired of it, and would gladly have an opportunity of doing a little leisurely shopping, is compelled always to have that afternoon or none. Why should attendants not be allowed to change their afternoons with one another, if they so pleased?

Again, an attendant's home is just so far distant that he or she cannot conveniently get there and back in an afternoon. The asylum is in a remote neighbourhood, the trains are slow and seldom. The journey to and from takes up the whole of the afternoon, and the visits to friends are practically limited to once a month. Why should not the attendant be allowed to forfeit his half-day in one week and add it to his half-day in the succeeding week, taking a whole day every fortnight instead of a half day every week? Again, the time for his whole holiday has come

round, and he has, of course, in the same week a half day. The obvious and fair course to pursue is to allow him to be absent for the afternoon of one day, the whole of the next day, and the night between. Yet he is frequently deprived of half the benefit of the holiday by being compelled to return to the asylum for the night.

One more instance. An attendant, whose friends live at a great distance, does not care to go out on his "whole day" holiday, but spends it in the asylum in his own room. When he visits them at his annual holiday it takes him a day to go and a day to return, practically reducing his seven days to five. Why should he not be allowed to forfeit these days, and add them, or some of them, to his annual holiday?

The need of supplying the attendants with a proper messroom to take their meals in, and to sit in when off duty, is now pretty generally recognised. This room should be comfortably furnished, and should contain a piano and games of draughts, dominoes, &c., for the attendants' use, as well as a bookcase furnished with books. This room should on no account open directly out of a ward, or it will be a standing temptation to the attendants to neglect their duty. In large asylums a billiard and smoking room may be provided for the male attendants. Much may be done by the provision of a singing class, of musical evenings, of classes in other subjects, undertaken by the chaplain and the medical officers, to brighten the leisure hours of the attendants, to provide them with subjects of interest, and to occupy minds that have necessarily many vacuous hours. Still, when all has been done, the need for some change of companionship, and especially for companionship with the other sex, will always make the neighbouring public-house a formidable rival to the attendants' recreation-room. To meet this difficulty, social meetings should be organised, in which the male and female attendants can meet together for friendly and social intercourse. To such meetings, which are of course held chiefly in winter and wet evenings, the women bring their needlework and the men their pipes and games. Some of the more sensible and better class of patients may be included. An officer should, of course, be always present to preserve decorum and give the initiative to the proceedings, which otherwise are apt to flag. The attendants come and go as they please; one sings a song, another "obliges" with a recitation, a third plays the violin or some other instrument; a fair amount of flirting goes on openly and aboveboard, and a very pleasant evening is thus spent. The writer has presided at scores of such social meetings, and knows well by actual experience how totally free they are from disadvantages, how highly they are appreciated by attendants, whose only other resource would be a tramp in a muddy lane or a visit to the public-house, and how much they contribute to rendering the attendants contented with their places.

There seems no valid reason why the attendants should not be allowed to invite their friends from outside to these meetings, it being, of course, understood that this privilege is allowed during good behaviour only.

When the matters here adverted to have been investigated and rectified, there will not be many complaints of too frequent changes among the attendants. Should, however, the changes still be too frequent, the cause will probably be found in the disposition of some person in authority over them. It is usually found that the changes complained of are far more frequent on one side of the house than on the other, and usually the greater frequency is on the female side. When this is the case, it may very likely mean that the head attendant or matron does not exercise her functions with the temper and discretion that are needful. It is rare to find a woman who can be fitly entrusted with plenary authority over other women; and if she be inclined to abuse her authority, a woman has such infinite tact in discovering precisely those points which will be most galling and provoking to her subordinates, and such ingenuity in applying irritants to the raw surface that she discovers, that there is no possible peace or comfort for the unfortunate object of her dislike except by a retreat from the sphere of her influence. The chief female officer should therefore be given to understand that considerable responsibility for the permanence of the female attendants rests upon her shoulders, and for any undue frequency of changes among them she should be taken to task.

The choice of attendants is, of course, a most important matter, and various principles have been laid down for the guidance of asylum authorities in this respect, the chief of which relates to the question of employing attendants who have previously served in other asylums. The general experience of superintendents is that such attendants are as a rule unsatisfactory. They are "up to all the tricks," and they do not commonly make desirable officials. At the same time, it is manifestly unfair, as well as unwise, to refuse to employ a man who may be a very good attendant, who has at any rate had experience of his duties, merely because he has found that existence in some asylum has been unbearable owing to one of the causes previously set down. With regard to this subject, it is strange that superintendents appear to forget, at any rate they scarcely ever avail themselves of the fact, that the Commissioners in Lunacy keep a register of all attendants employed in institutions for the care of the insane, and that this register contains the whole previous record of each attendant so long as he has been in these institutions, with the reasons for his leaving each of them. The Commissioners are always willing and ready to answer questions from their register, and it is a matter for regret that this register is not more often appealed to by superintendents of asylums.

The next most frequent source of attendants for asylums is the army, and a very large proportion of attendants are men who have served in the army, especially bandsmen, who are sought after on account of their musical attainments. How unsatisfactory such men are is a matter of notoriety, and is not a cause for wonder. The fact is, that the rigid discipline and the treatment of men *en masse* that obtain in the army are qualities precisely the opposite of those required in the management of the insane. The requisites for the proper attendance on insane persons are first of all individuality in the study and treatment of them, and secondly the allowance of the utmost possible liberty of action within the narrow limits in which they are confined. It is not to be expected, therefore, that a man who has spent three or four or more of the most receptive years of his life in having one system thoroughly drilled into him, should be able to discard it entirely, and to work on a system that is actually contradictory.

The best attendant would, one would think, be the man who entered the service young, and who was properly trained to it while his mind was still in its plastic and receptive stage—who was brought up to it as the business of his life. The objections to the employment of such young fellows are, that the young are unlikely to have the patience or the tact necessary for dealing with the insane, and that few of them would be likely to remain permanently in such an occupation as that of asylum attendant until they have seen something of the world and tried their fortunes at other employments. As matters actually stand, these objections are no doubt to a large extent valid. But it is obvious that they are capable of being removed. If a young man do not possess by nature sufficient patience and tact to enable him to deal sufficiently with the insane, these are qualities that may, if he have an average good disposition to begin with, be drilled into him by placing him under the tuition of a staid and experienced attendant of strong and trustworthy character; and if the occupation of an attendant is not sufficiently attractive to induce men to enter it until they have tried and failed at other employments, then it should be made sufficiently attractive. It should be placed on such a basis that, as already said, an attendant on entering the service should see a career before him, and a career which it is worth the while of a steady, intelligent, high-principled young man to follow. Until this is done, the wail of the superintendent at the inefficiency of his attendants will still be heard in the land.

The supply of female attendants is more plentiful than of male, and the quality is upon the whole higher, the reason being no doubt that female attendants do frequently, if not as a rule, take to asylum service as their first employment, and the comparative abundance and

cheapness of female labour renders suitable persons of this sex easier to secure, even at the lower scale of wages offered on the female than on the male side. The difficulty of retaining the services of the female attendants is always greater than that of the male, since, in addition to other reasons for leaving, which they have in common with the men, the female attendants leave on getting married. In this way the services of some of the best female attendants are lost every year, and lost irretrievably, and to such losses the asylum managers must resign themselves.

Attendants should then be, when engaged, young men or women of from twenty to twenty-five years of age. They should be engaged in the first place on probation for a month, and at the end of this preliminary period it will be plain to the superintendent whether he or she shows sufficient aptitude for the duties to receive a uniform and to undergo the necessary training; while on the other hand the probationer will have ample opportunity to come to a decision as to whether the employment is likely to suit him or her, and to decide whether to stay or go accordingly.

If the attendant is found suitable and is willing to continue in the service, he or she is provided with uniform, and enters on a further period of probation of a year's duration, which is to be devoted to acquiring a thorough knowledge of all the departments of an attendant's duties. During this term of probation the probationer should be placed in succession, not necessarily in every ward, but in at least one ward of each class throughout one side of the asylum, thus learning practically the methods of dealing with the insane sick, with epileptics, with violent and suicidal patients, &c. A young and inexperienced probationer should not be placed in sole charge of a suicidal patient. So extremely responsible a duty should be entrusted to an attendant of some experience, and nothing is more likely to disgust and deter a probationer than the monotony and repellent character of this duty.

During the probationary period the attendants should be instructed both by lectures and by practical courses in the various departments of their duties, and examined upon them from time to time. Since it is a part of their duty to attend these lectures, the lectures should be delivered during duty hours, and the probationers should not be required to give up any portion of their already scanty leisure to compulsory duty. If any of them choose voluntarily to attend additional supplementary classes held after duty hours, that is another thing. The writer has never found any difficulty in obtaining a full attendance to such voluntary classes.

Once a week is sufficiently often for the compulsory lectures, which may be given for three months, then intermitted for three months

while the practical demonstrations are being given, and then resumed for three months more. In this way the entire course can be gone through every year.

The following is a convenient scheme for the subjects and order of the lectures and demonstrations, which the medical officer who undertakes the lectures can of course vary as he sees fit.

Scheme of Lectures for Attendants.

PART I.

General Explanation of Duties of Attendants as Nurses to Sick People.

Elementary Facts of Anatomy and Physiology.

The Skeleton : Fractures of Bones, Simple and Compound. First Aid.

Muscles : Their use. Effects of Exercise and Disuse.

Circulation : Fainting. Position of Main Blood-vessels, Bleeding. First Aid.

Breathing : Ventilation, Artificial Respiration, Dyspnoea, Cough ; Deglutition :

Anatomy of Pharynx, Epiglottis, Choking. Aid.

Food : Its uses. Digestion, Constipation and Diarrhoea, and their effects. Vomiting.

Renal Functions : Matters to notice and report concerning Urine.

Function of Nerves and Grey Matter, Paralysis, Convulsion.

PART II.

Care of the Insane.

General Relations of Mental and Bodily Phenomena.

Chief Symptoms of Mental Conditions : Depression, Exaltation, Excitement. Delusions, Hearing Voices, &c.

Conduct : Disorders of, with respect to Dress, Food, Occupation, &c.

Suicide, Violence, Destructiveness, Idleness, Bad Habits. Ways of dealing with these disorders.

Care of the Cleanliness of Patients : Rules for Bathing, Care of Hair, Feet, Nails, Clothes, &c. Dirty Patients : Treatment.

Care of Comfort, &c., of Patients : Warmth, Sick-nursing, Bed-making, Feeding, &c.

Care of Cleanliness and Order of Wards, Furniture, and Utensils : How to clean, keep, and manage.

It is scarcely necessary to say that attendants should always be provided with uniform. Patients will usually yield a willing obedience to any one whom they recognise to be in authority, but unless the attendants exhibit by their possession of uniform the insignia of authority, they will have far more difficulty in maintaining control over the patients. It is unreasonable to expect one person newly placed among a crowd of others to attend to the behests of any one among these others who is in no way distinguished in appearance from the rest. But the possession of a uniform at once confers distinction,

and very materially assists in the maintenance of authority. The uniform for men is usually a frock suit of dark blue cloth, with a cap. For the female attendants the costume is more varied, different colours being adopted in different asylums according to the taste of the authorities. Each attendant should have three uniform dresses, two of print and one of warmer material, one of each every six months, with three caps, to be renewed every six months, and six aprons, two to be renewed every six months. It is well to make a distinction between the uniform of the charge- and under-attendants. The former, if men, should have a chevron on the sleeve; if women, a different coloured ribbon in the cap, or a different pattern of cap, or some mark by which they can be readily distinguished.

In the management of attendants endeavour should be made to cultivate at once an *esprit de corps* and a healthy rivalry and emulation in the performance of their duty. A small money prize offered to the attendant whose patients are neatest and most cleanly in appearance will have a very salutary effect. The system of chevrons, which works with such excellent results in the army and the post-office service, may be adopted in asylums with every prospect of benefit. An increase of pay or a step in rank is doubtless a very important gratification to a man or a woman, and a very proper reward for good service; but the gratification that attends the bestowal of either reward is very greatly enhanced if at the same time a visible decoration is added, which is known to be an honourable distinction, and which proclaims to the world in which the individual lives the fact that he or she has been considered worthy of advancement. Gold braid is cheap enough; the addition of a chevron is equally applicable to the costume of both men and women; and it cannot be doubted that the adoption of such a system of decoration in recognition of meritorious service would be a great gratification to the recipients, and an efficient means of increasing their contentment.

In some asylums a system exists of adding a small sum, say ten shillings per quarter, to the nominal pay of the attendants, under the title of good-conduct money, any portion or the whole of which may be withheld for lapses from duty; and the system is found to work well in practice.

A plan which might be adopted with advantage is to offer special emoluments to attendants of long or specially meritorious service. Such emoluments might take the form of a gratuity on the completion of, say, five, eight, and ten years' service, or it might take the form of an extension of leave after similar periods.

Another trifling advantage that might be allowed to attendants is that of cultivating a plot of ground similar to and adjoining those of

the patients, as formerly advocated. Attendants might hold this plot on condition of supervising in turn the patients who cultivate the adjoining plots during the hours between eight and ten. Another privilege that would be highly appreciated is that of extending the hours during which the male attendants are allowed to smoke. It is obvious that they cannot be allowed to smoke all day long, but to prohibit smoking till 8 P.M. is an unnecessary restriction. I have been in the habit of allowing attendants to smoke after 5 P.M., and have not found that any serious deterioration has resulted.

The duties of attendants will be found described in full in "The Attendant's Companion," a separate work by the author.

Any caprice or undue severity in the treatment of attendants is much to be deprecated. They must, of course, be kept up to their work, and discipline must be maintained. But when an attendant is dismissed it should be for a cause which is not only adequate in itself, but which appears manifestly adequate to the general sense of the rest of the attendants. If the cause do not plainly appear to them, and if the dismissal do not appear to be just and right, a general sense of insecurity will be produced throughout the whole body of attendants, and a plentiful crop of resignations is likely to be the result; the natural feeling being that it is better to resign voluntarily while the character is still good, than to run the chance of being ruined by a dismissal which even good conduct appears powerless to avert. In order to give security to attendants that they hold their positions by some tenure more secure than mere caprice, it is much to be desired that every dismissal should need to be endorsed by the Committee. Of course there are superintendents with whom this security is not required, and if every superintendent were perfectly wise and just, it would not be required in any case; but so long as asylums are officered by fallible human beings, some safeguard against their fallibility is required. And even if the dismissal is, as a matter of fact, just and right, yet it is important, as already said, not only that it should be so, but that it should be known to be so; and no better guarantee of its justice could be obtained than its endorsement by the Committee.

In number the attendants should be at least one to every ten patients, exclusive of laundry-maids, artisans, and night attendants. With less than this it is not possible that the patients can be properly attended to, if, that is to say, they are of the usual mixed class, and not all chronic imbeciles and demented; nor is it fair, with a less proportion than this, to hold the attendants responsible for all that may occur in the wards. It must be remembered that the full staff of attendants is present in the wards only on exceptional occasions. Some are always absent on leave; some are out with walking or working parties;

some are ill ; some are watching special cases, and are not available for the ordinary duties of the wards. To estimate the number of attendants required, it is necessary, therefore, first to calculate the minimum that are needed in the wards, and then to add to these a sufficient number to compensate for those who must necessarily be absent from the causes above specified, and to provide for such contingencies as the watching of suicidal cases and the nursing of patients dangerously ill.

INDEX.

ABSENCE of patient for benefit of health, 241.

— on trial, 221, 241.

Accessibility of asylums, 5.

Accident, 143.

Admissions, annual, 6.

After-care, 191.

Aggregation of patients, 135.

Aggressive tendencies, 207.

Airing-courts, 57, 137.

Allotment gardens, 97, 293.

Alterations of asylums, 194.

— of hospital, 242.

— of licensed house, 242.

Amusement of patients, 100.

Aquaria, 25.

Artisans, 193.

Assistant medical officer, 201, 203, 244.

— office, 54.

Attendants, 284.

— changes of, 191, 285.

— charge, 174.

— — report of, 180.

— clubroom, 57.

— messrooms, 57.

— night, 169.

— — report of, 182.

— notice of engagement of, 276.

— sleeping rooms, 56.

— training of, 284, 292.

Authority, conflict of, 173, 193.

Aviary, 25, 60.

BADMINTON, 106.

Baskets for soiled towels, 36.

Bathing, rules for, 163.

Bath-rooms, 34.

— general, 164.

Baths, 34, 133.

Beds, 26.

Bedsteads, 27, 146, 147.

— feet of, 27.

Beer, 64, 69.

Beverages, 64.

Bibs, 170.

Billiards, 101.

Blankets, 29.

Blinds, 11.

Blocks (*see* Pavilions).

Boiler, 52.

Boiler-house, 52.

Bonnets, 80.

Bookcases, 24.

Book of condition on admission, 252.

Books, 101.

— to be kept in asylums, 242.

— repairing of, 185.

Boot-room, 8, 43.

Boots, 80, 83, 140.

Bowls, 103.

Brackets, 24.

— gas, 17.

Bread, 67.

Brush-closets, 42.

Brushes, hair, 29.

Burners, gas, 17.

Butter, 68, 71.

CARPENTER'S shop, 53, 156, 157.

Carpet, cork, 21.

— stair, 150.

Case-book, 209, 250.

Case-taking, 251.

Castors, 27.

Catalogue of library, 184.

Caution as to suicidal patient, 127.

Certificates, requirements of, 211, 214.

Chairs, 22, 45.

Chamber utensils, 29.

Chancery visitors, 232, 233, 235, 239, 275, 276.

Chapel, 47.

Chaplain, 184.

Charge attendant's report, 180.

Cheese, 67, 72.

Chemises, 79.

Chevrons, 293.

Chilblains, 256.

Children, 262.

Classes for patients, 191.

— attendants, 292.

Classification of patients, 7, 206, 209.

Cleanliness of patients, 163.

Clerk, 274.

Closets, slop, 42.

— soiled linen, 43.

— water, 37.

— — in airing courts, 60.

Clothing, 78.

— quantity of, 81, 170.

Clubroom for attendants, 57.

Coal, 13.

- Coal boxes, 43.
- stores, 43.
- Coats, 82.
- Cocoa, 69, 71.
- Coffee, 67, 71.
- Coils, hot, 14.
- Collars, 169, 170.
- Combination garments, 79, 81.
- Combs, 29.
- small-tooth, 30.
- Committee of person, 217.
- visitors, 173.
- Commissioners in Lunacy, 84, 209, 211—240.
- Concerts, 118.
- Condition on admission, 252.
- Conduct, 257.
- Conolly, 197.
- Continuation diary, 226.
- orders, 225.
- Consent of Commissioners, when required, 241.
- Cooking, 72.
- Coroner, notice of death to, 234.
- Correspondence of patients, 239.
- Corridors, heating of, 14.
- Cost of large and small asylums, 5.
- Couches, 47.
- Crichton Browne, Sir James, 197.
- Cricket, 109.
- Criminal lunatic, 219, 222, 228, 231.
- Croquet, 109.
- Cupboards, 25.
- Curtains, 21.
- Cushions, 23.

- DANCES, 114.
- Dangerous patient, 229.
- Dangers of employment of patients, 98.
- Dark room, 274.
- Date of expiration of reception orders, 227.
- Day-rooms, 20.
- Death of patient, notices to be sent on, 234.
- Decorations, 24.
- Defects in reception orders, 212.
- certificates, 214.
- Demented patients, employment for, 95.
- Desert, awards to, 174-178.
- Destructive patients, treatment of, 84.
- Detention of patients, 120.
- Diary, continuation order, 226, 243.
- superintendent's, 224.
- Dietary of insane, 62.
- Diets, extra, 75.
- Dining-hall, 44.
- Dirty habits, 163, 165, 208, 259.
- causes of, 165.
- significance of, 166.
- treatment of, 166, 171.
- Discharge of patients, criminal, 231.
- pauper, 231.
- private, 229.

- Dispensary, 55, 272.
- Divine service, 183.
- Division of patients into small groups, 3.
- Dormitories, 8, 25.
- cubic content of, 26.
- supervision, 8, 30.
- Drawers, 78, 82.
- Dress, 260.
- Dresses, 78, 81, 170.
- Drill, 95.
- Drugs, 272.
- Duties of assistant medical officer, 247.
- clerk, 274.
- engineer, 280.
- matron, 278.
- steward, 277.
- superintendent, 198.
- — daily, 243.
- — medical, 202.
- — statutory, 210.

- EAR, 256.
- Employment of epileptics, 145.
- patients, dangers of, 98.
- — difficulties of, 94.
- Emotions, 265.
- Engineer, 280.
- Epilepsy, 143.
- Epileptic patient, 206.
- Equipment of asylums, 5.
- Escape, 235.
- Evenings, social, 288.
- Examination of patient, 222, 255.
- Extinction of fire, 160.
- Eye, 256.

- FALLS, 143.
- causes of, 146.
- direction of, 144.
- Feeble patients, 208.
- Feeling, 265.
- Fires, 108.
- Fire alarm, 161.
- brigade, 162.
- extinction of, 160.
- hose, 161.
- mains, 161.
- origins of, 157.
- precautions against, 155.
- Fire-guards, 16.
- Fireplaces, 13, 15, 156.
- Fish, 65.
- Fits, warnings of, 143, 144.
- Floors, 9.
- covering of, 21, 149.
- defects in, 148.
- of corridors, 48.
- of kitchen, 49.
- of recreation-hall, 46.
- of water-closets, 38.
- polishing, 9, 149.
- Flour, 67.
- Flower-beds, 58.
- Flowers, 25.

- Food, 61.
 — impaction of, in throat, 151.
 — prehension of, 257.
 — testing, 66.
 — varieties of, 63.
- Football, 109.
- Forks, 74.
- Form of application to Commissioners for leave of absence of patient, 241.
 — certificates, 211.
 — judicial reception order, 211-213.
 — notice of admission on judicial order superseding urgency order, 224.
 — notice of death to coroner, 234.
 — order by committee, 217.
 — statement, 211.
 — summary reception order, 217, 218.
 — urgency order, 215.
- Foul laundry, 51, 52.
- Furniture, 21.
 — table, 74.
- GAMES, 60, 101.
 — for attendants, 288.
- Gas, 16.
 — burners, 16, 32, 156.
 — meters, 14, 281.
 — stoves, 156, 157.
- General paralytics, 7, 151.
- Glass, broken, 130.
- Golf, 109.
- Grease traps, 281.
- Grounds for games, 110.
- Grouping of patients, 2.
- Gutters, 281.
- HAIR of female patients, 163, 165, 169.
- Handrails, 49, 150.
- Hands of patients, 256.
- Hanging, means of, 131, 132.
- Hats, 80.
- Head attendant, 281.
 — duties at bathing, 164.
- Heating, 13.
 — of corridors, 14.
 — of dormitories, 26.
 — of recreation-hall, 46.
 — of single rooms, 32.
- Height of asylums, 4.
- Hospital, 8.
- Hot coils, 14.
- INDIVIDUALITY of treatment, 2, 5, 20.
- Industrious patients, 208.
- Infectious cases, 207.
- Infirmary, 7.
- Injury of patient on admission, 222-223.
- Inspection of officials, 179.
 — of wards, 279.
- Instruments, care of, 271.
- Ironing-room, 52, 157.
- Knives, 74, 130.
 — home-made, 131.
- LAUNDRY, 51, 97, 157.
 — foul, 51, 52.
- Lavatory, 41.
- Lawn-tennis, 104.
- Lectures to attendants, 292.
- Letter-boxes, 24.
- Liberty of patients, 209.
- Library, 183.
- Lighting, 16.
 — of recreation-hall, 46.
 — of single rooms, 32.
- Linen, changes of, 170.
- Linoleum, 21, 149.
- Locks, 12.
 — of shutters, 32.
 — of single rooms, 33, 159.
- Lockers, 30.
- Lord Chancellor's visitors. *See* Chancery visitors.
- Lunatic wandering at large, 216.
- MASTERS in Lunacy, 237.
- Matches, 156.
- Matmaking, 96.
- Matron, 278.
- Matting, 21.
- Mattress, 26, 28.
- Meat, 66, 69.
- Mechanical restraint, certificate of, 237.
 — definition of, 237.
 — instruments of, 237.
 — register of, 237.
- Memory, 267.
 — disorders of, 268.
- Merit in officials, 174.
- Messroom for attendants, 57.
- Meters, gas, 14, 15, 280.
 — water, 20, 280.
- Method of case-taking, 269.
- Milk, 68.
- Mind, 264.
- Mirror, 29.
- Mortuary, 55.
- Mugs, 75.
- Museum, 191.
- Mustard, 69, 71, 75.
- NEATNESS of apparel, 169, 261, 280.
- Neckties, 83, 169.
- Newspaper stands, 24.
- Night attendants, 154, 158.
 — — and dirty patients, 169.
- Noisy patients, 8, 208, 286.
- Notice of admission, 223-4.
 — of desire for personal interview, 223.
 — of death, 234.
 — of discharge, 232.
 — of engagement and dismissal of attendants, 238.
 — of escape, 236.

- Notice of judicial examination of patient
 admitted on inquiry order, 224.
 — of recapture, 236.
 — of recovery, 228.
 — of removal, 233.
 — one month, 225.
 — six day, 224.
 — that a discharged patient is not
 recovered, 232.
 Notices, list of, 238.
 — to be posted, 239.
 Number of patients in wards, 4, 21.
 — — in dormitories, 25.

 OBJECTS of asylums, 1.
 Obstacles, causes of falls, 148.
 Occupations of patients, 84.
 Offices, 53.
 Order, continuation, 225.
 — for reception of criminal lunatic,
 219.
 — — of private patient, 211.
 — — of pauper patient, 218.
 — of committee of person, 217.
 — of reception, date of expiration, 227.
 — summary reception, 216.
 — suspension of, 217.
 — urgency, 215; duty of superinten-
 dent as to, 223.

 PADDED rooms, 34.
 Parole, liberty on, 121.
 Passages, 48.
 Pathological laboratory, 55.
 Paths, 59.
 Pavilions, 6, 7.
 Payment of patients, 85.
 Peas, 69.
 Pepper, 6, 9, 71, 75.
 Perception, 268.
 Petticoats, 79, 171.
 Photographer's paste, 274.
 Photographic studio, 55.
 Photography, 119, 273.
 Piano, 24.
 Pictures, 24.
 Pillow-cases, 171.
 Pillows, 78.
 Plan of asylum, 6.
 Plates, 74.
 Polish for floors, 9.
 Politeness, 263.
 Post-mortem examination, 209, 270.
 Potatoes, 69, 72, 73.
 Power and responsibility, 173.
 Precautions against falls of epileptics,
 145.
 — — fire, 155.
 — — suffocation, 151.
 — — suicide, 129.
 — — violence, 138, 139.
 — in construction of asylums, 4, 155.
 Printing-press, 191.
 Provocations to violence, 133, 135.

 Punishment, 176.
 — by whom to be inflicted, 178.
 — occasion of, 177.
 — promptness of, 177.
 — should fit crime, 177.

 QUILTS, 29.
 Quoits, 102.

 RACES, 113.
 Rackets, 107.
 Razors, 129.
 Reasoning, 266.
 Recapture, 236.
 Receiving-room, 47.
 Recent cases, 7, 8, 206.
 Reception of private patient on judicial
 reception order, 211.
 — documents required, 211.
 — requirements of order, 212.
 — on urgency order, 215.
 — on summary reception order, docu-
 ments required, 216.
 — on order of Committee of person,
 217.
 — of criminal lunatic, 219.
 — pauper patient, 218.
 — order, amendment of, 241.
 Recovery of patient, 228.
 — of criminal lunatic, 228.
 Recreation hall, 45.
 Refractory ward, 207.
 Register of attendants, 289.
 — of patients, 242, 277.
 Removal, admission of private patient
 on, 219.
 — documents required, 220, 221.
 — from asylum, authority for, 232.
 — from workhouse, 221.
 — in case of fire, 159.
 — of body of patient without coroner's
 permit, 235.
 — of criminal patient, 222, 233.
 — of pauper patients, 220, 232.
 Report of artisans, 182.
 — charge attendant, 180.
 — engineer, 182.
 — head attendant, 182.
 — workmistress, 182.
 — seven days, to Commissioners, 224.
 — one month, to Commissioners, 225.
 — of condition of criminal lunatic,
 228.
 Responsibility and power, 173.
 Restraint, 133.
 Rewards to officials, 178.
 Rice, 69.

 SALT, 69, 75.
 Scalding, 154.
 Screens, 4, 23, 30, 164.
 Scullery, 8, 42, 50.
 Seats, 22.
 — in airing courts, 59.

Secretary of State, 219, 222, 231, 233.
 Segregation of patients, 2, 135, 136.
 Serving food, 73.
 Settees, 22.
 Sexes, separation of, 97, 115.
 Sexual habits, 209.
 Shawls, 81.
 Sheets, 171.
 — use of, as towels, 164.
 Shirts, 82, 170.
 Shrubs, 58.
 Shutters, 31.
 Singing-class, 183.
 Single rooms, 30, 159.
 — proportion of, to dormitories, 7.
 Sinks, 8, 50.
 Size of asylums, 4, 18, 195.
 — wards, 4.
 Skittles, 106.
 Slop-closets, 42.
 Smoking of attendants, 294.
 Spouge, use of, in bathing, 164.
 Staff, accommodation of, 56.
 — general considerations, 172.
 Stage, 46, 157.
 Stain for floors, 9.
 Staircases, 49, 158.
 Stays, 79.
 Steps, 150.
 Steward, 277.
 Stockings, 80, 146, 170.
 Store-rooms, 8, 44, 52.
 Suffocation, 151.
 Sugar, 68.
 Suicidal patient, 174, 207.
 — tendency, degrees of, 125, 258.
 — treatment of, 126, 128.
 Superintendent, character of, 196.
 — deputy, 245.
 — duties, daily, 242.
 — — medical, 202.
 — — statutory, 198.
 — — supremacy of, 192.
 Superintendent's office, 53.
 Supervision, 2, 153.
 — at night, 179.
 — of officials, 175, 178.
 Surprise visits, 179.
 Suspension of reception orders, 217, 218.
 Swallowing, 258.

TABLEAUX, 119.
 Tables, 22, 45.
 Tea, 68, 70.
 — and wet beds, 169.

Temperature of bath, 163.
 — of wards, 7.
 Theatricals, 116.
 Thought, 265.
 Tinned provisions, 69, 71.
 Token coinage, 86.
 Towels, 42, 36, 171.
 Treatment, 2.
 Trousers, 82, 169, 171.
 Tumblers, 74.
 Turf, 111.
 Types of asylum, 6.

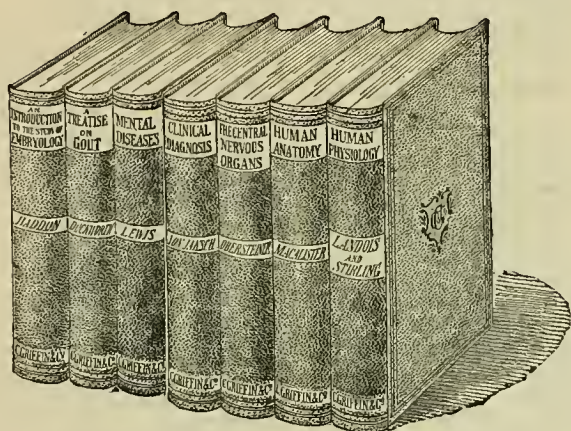
UNIFORM for attendants, 291, 292.
 Untidy habits, 169, 170.
 Urinals, 37.

VALANCES, 22.
 Vegetables, 66.
 Ventilation, 10.
 — of recreation-hall, 46.
 — of single rooms, 32.
 Vinegar, 69.
 Violence, 133, 263.
 — precautions against, 138, 139.
 — treatment of, 136, 140.
 Violent patients, 207.
 Visiting room, 48.
 Visitors, committee of, 173.
 Visits, medical, 203.
 — surprise, 179.
 — to patients, 5, 240.
 — to wards, 179.

WAISTCOATS, 82, 169.
 Walls, 8.
 — of kitchen, 49.
 — of water-closets, 38.
 Wards, 7.
 Waste of water, 20, 40.
 Wash-house, 51.
 Water, 17.
 — closets, 37.
 — in airing courts, 60.
 — meters, 20.
 — softening, 18.
 — to be cut off at night, 281.
 — waste preventers, 40.
 Weapons, 138.
 Weighing patients, 270.
 Windows, 9, 10, 31.
 — inspection, 33.
 — of corridors, 43.
 — of dormitories, 25.
 Workshops, 53, 156.

A CATALOGUE OF STANDARD MEDICAL WORKS

PUBLISHED BY
CHARLES GRIFFIN & COMPANY, LIMITED.



MESSRS. CHARLES GRIFFIN & COMPANY'S PUBLICATIONS may be obtained through any Bookseller in the United Kingdom, or will be sent Post-free on receipt of a remittance to cover published price. To prevent delay, Orders should be accompanied by a Remittance. Cheques and Postal Orders to be crossed "SMITH, PAYNE & SMITHS."



General and Technical Catalogues Post-free on Application.

LONDON:
EXETER STREET, STRAND.

INDEX TO AUTHORS.

INDEX TO SUBJECTS.

	PAGE
AITCHISON (R.), Medical Handbook, . . .	22
ANDERSON (Prof. M'Call), Skin Diseases, . . .	13
BLYTH (A. W.), Foods and Poisons, . . .	31
BURNET (R., M.D.), Foods and Dietaries, . . .	33
BURY (Judson, M.D.) Clinical Medicine, . . .	7
CAIRD & CATHCART, Surgical Handbook, . . .	22
CLARK (Sir Andrew), Fibroid Phthisis, . . .	9
CRIMP (W. S.), Sewage Disposal Works, . . .	21
DAVIES (Lt-Col.), Hygiene, . . .	23
DAVIS (Prof. J. R. A.), Biology, . . .	30
—The Flowering Plant, . . .	30
—Zoological Pocket-book, . . .	30
DONALD (Arch., M.D.), Midwifery, . . .	25
DONKIN (H. Bryan), Diseases of Childhood, . . .	9
DUCKWORTH (Sir D., M.D.), Gout, . . .	10
DUPRÉ and HAKE, Manual of Chemistry, . . .	32
ELBORNE (W.), Pharmacy, . . .	32
ELDER and FOWLER, Diseases of Children, . . .	24
FOXWELL (A., M.D.), Heart and Lung Diseases, . . .	18
GARROD (A. E., M.D.), Rheumatism, . . .	11
HADDON (Prof.), Embryology, . . .	18
HELLIER (Dr.), Infancy and Infant-Rearing, . . .	35
HILL (Dr.), Physiologist's Note-Book, . . .	27
HORSLEY (V.), Brain and Spinal Cord, . . .	15
HUMPHRY (J., M.D.), Manual of Nursing, . . .	33
HUNTER Wm., M.D.), Pernicious Anæmia, . . .	19
JAKSCH (Prof. R. v.), Clinical Diagnosis, . . .	8
LAFAR (Dr. Franz), Technical Mycology . . .	26
LANDIS (Dr.), Management of Labour, . . .	25
LANDOIS and STIRLING'S Physiology, . . .	5
LEWIS (Bevan), Mental Diseases, . . .	16
MACALISTER (Prof.), Human Anatomy, . . .	4
MACREADY (J., F.R.C.S.), Ruptures, . . .	19
MANN (Prof. Dixon, M.D.), Forensic Medicine and Toxicology, . . .	17
MERCIER (Ch.), Asylum Management, . . .	17
MEYER and FERGUS, Ophthalmology, . . .	14
OBERSTEINER and HILL, Nervous Organs, . . .	18
OPPENHEIMER (Dr. C.), Ferments, . . .	27
PAGE (H. W., F.R.C.S.), Railway Injuries, . . .	20
PAWLOW (Prof.), Digestive Glands, . . .	13
PHILLIPS (Dr. J.), Diseases of Women, . . .	25
PORTER and GODWIN, Surgeon's Pocket-book, . . .	23
REID (Geo., D.P.H.), Practical Sanitation, . . .	34
RICHMOND (H. Droop), F.C.S., Dairy Chemistry, . . .	26
RIDDELL (J. Scott, M.D.), Ambulance, . . .	35
RIEDER and DELEPINE, Urinary Sediments, . . .	6
SANSOM (A. E., M.D.), Diseases of the Heart, . . .	12
SEXTON (Prof.), Quantitative Analysis, . . .	32
—Qualitative Analysis, . . .	32
SMITH (Johnson, F.R.C.S.), Shipmasters' Medical Guide, . . .	33
SQUIRE (Ed. J., M.D.), Consumption, . . .	34
STIRLING (Prof.), Practical Physiology, . . .	28
—Practical Histology, . . .	29
THOINOT, MASSELIN, and SYMMERS, Bacteriology, . . .	24
THORBURN (W.), Surgery of Spine, . . .	20
THORNTON (J.), Surgery of Kidneys, . . .	20
WEST (S., M.D.), Diseases of the Organs of Respiration, . . .	12
WESTLAND (A., M.D.), Wife and Mother, . . .	35
WOOD (F.), Sanitary Engineering, . . .	21
SCIENTIFIC SOCIETIES (Year-book of), 36	

	PAGE
AMBULANCE,	35
ANATOMY, Human,	4
<i>Anatomy and Physiology (Journal of)</i> , . . .	15
ASYLUM MANAGEMENT,	17
BACTERIOLOGY,	24, 27
BIOLOGY,	30
BOTANY,	30
BRAIN, The,	15, 16, 17, 18, 19
CHEMISTRY,	32
CHILDHOOD, Diseases of,	9, 24
CLINICAL Diagnosis,	8
CLINICAL Medicine,	7
CONSUMPTION,	9, 12, 18, 34
DAIRY CHEMISTRY,	26
DIETARIES for the Sick,	33
DIGESTION,	13
EMBRYOLOGY,	18
EYE, Diseases of the,	14
FERMENTATION,	27
FOODS,	31, 33
FORENSIC MEDICINE,	17
GOUT,	10
HEART, Diseases of the,	12
HISTOLOGY,	29
HYGIENE and Public Health,	21, 23, 34
INFANTS, Rearing of,	35
INSANITY,	16, 17
KIDNEYS, Surgery of the,	20
LABORATORY Hand-books,	28, 29, 32
MENTAL DISEASES,	16, 17, 18
MICROBIC Diseases of Animals,	6
MYCOLOGY,	26
NERVOUS ORGANS, Central,	18
NURSING, Medical and Surgical,	33, 35
OBSTETRICS,	25
PERNICIOUS ANÆMIA,	19
PHARMACY,	32
PHTHISIS,	9, 12, 18, 34
PHYSIOLOGIST'S Note-book,	27
PHYSIOLOGY,	5, 13, 28
POISONS, Detection of,	17, 31
RAILWAY INJURIES,	20
REFERENCE POCKET-BOOKS—	
—Hygiene,	23
—Medical,	22
—Surgical,	22, 23
—Zoological,	30
RESPIRATORY DISEASES,	12
RHEUMATISM,	11
RUPTURES,	19
SANITATION,	21, 23, 34
SEWAGE Disposal Works,	21
SHIPMASTERS' Medical Guide,	33
SKIN, Diseases of the,	13
SPINAL Cord,	20
SURGERY of Brain,	15
—of Kidneys,	20
—Military,	23
—Minor,	22
—Ruptures,	19
—of Spinal Cord,	20
URINARY SEDIMENTS, Atlas of,	6
VETERINARY MEDICINE,	6, 24
WOMEN, Diseases of,	25, 35
YEAR BOOK of Learned Societies,	36
ZOOLOGY,	30

Charles Griffin & Co.'s Medical Series.

Standard Works of Reference for Practitioners and Students.

Issued in LIBRARY STYLE, large 8vo, Handsome Cloth, very fully Illustrated.

ANATOMY AND PHYSIOLOGY.

	PAGE
Human Anatomy,	PROF. MACALISTER, M.D., 4
Human Physiology,	PROFS. LANDOIS AND STIRLING, 5
Embryology,	PROF. HADDON, 18

DIAGNOSIS AND TREATMENT OF DISEASE.

Clinical Diagnosis,	DRS. V. JAKSCH AND CAGNEY, 8
Clinical Medicine,	JUDSON BURY, M.D., 7
Fibroid Phthisis,	SIR ANDREW CLARK, M.D., 9
Gout,	SIR DYCE DUCKWORTH, M.D., 10
Rheumatism,	ARCH. GARROD, M.D., 11
Pernicious Anæmia,	WM. HUNTER, M.D., 19
Diseases of the Organs of } Respiration,	SAMUEL WEST, M.D., 12
„ Childhood,	BRYAN DONKIN, M.D., 9
„ the Eye,	DRS. MEYER AND FERGUS, 14
„ the Heart,	A. E. SANSOM, M.D., 12
„ the Skin,	PROF. M'CALL ANDERSON, 13
Atlas of Urinary Sediments,	PROFS. RIEDER AND DELÉPINE, 6

THE BRAIN, NERVOUS SYSTEM, LEGAL MEDICINE, &c.

The Brain and Spinal Cord,	VICTOR HORSLEY, F.R.C.S., 15
Central Nervous Organs,	DRS. OBERSTEINER AND HILL, 18
Mental Diseases,	BEVAN LEWIS, M.R.C.S., 16
Asylum Management,	CHAS. MERCIER, M.D., 17
Forensic Medicine and Toxicology,	PROF. DIXON MANN, 17
Poisons: Effects and Detection,	A. WYNTER BLYTH, 31
The Digestive Glands,	PROF. PAWLOW, 31

SURGERY.

Ruptures,	J. F. C. MACREADY, F.R.C.S., 19
Surgery of the Kidneys,	KNOWSLEY THORNTON, F.R.C.S., 20
„ Spinal Cord,	WM. THORBURN, F.R.C.S., 20
Railway Injuries,	H. W. PAGE, F.R.C.S., 20

CHEMISTRY, SANITATION, AND ENGINEERING.

Dairy Chemistry,	H. DROOP RICHMOND, F.C.S., 26
Sanitary Engineering,	F. WOOD, A.M.Inst.O.E., 21
Practical Sanitation,	G. REID, D.P.H., 34
Sewage Disposal Works,	SANTO CRIMP, C.E., 21
Technical Mycology,	LAFAR AND SALTER, 26
Ferments,	C. OPPENHEIMER, M.D., 27

* * Other Volumes in active Preparation.

LONDON: EXETER STREET, STRAND.

By Prof. MACALISTER, M.D., F.R.S.

A TEXT-BOOK OF HUMAN ANATOMY

(SYSTEMATIC AND TOPOGRAPHICAL),

INCLUDING THE EMBRYOLOGY, HISTOLOGY, AND MORPHOLOGY OF
MAN, WITH SPECIAL REFERENCE TO THE REQUIREMENTS
OF PRACTICAL SURGERY AND MEDICINE.

BY

ALEXANDER MACALISTER, M.A., M.D., F.R.S., F.S.A.,

Professor of Anatomy in the University of Cambridge, and Fellow of St. John's College; Examiner in
Human Anatomy, University of London.

In Large Svo. With 816 Illustrations. Handsome Cloth, 36s.

OPINIONS OF THE PRESS.

"By far THE MOST IMPORTANT WORK ON THIS SUBJECT that has appeared in recent years, . . . treating its subject THOROUGHLY AND COMPREHENSIVELY. . . . The histology of the tissues is most ably and lucidly described."—*The Lancet*.

"THIS SPLENDID VOLUME fills up what was a great want in works on human anatomy. . . . We get morphology as a basis, and thread our way upwards."—*Saturday Review*.

"Contains an enormous amount of valuable matter. . . . A work which we feel sure will be a main factor in the advancement of scientific anatomy. In addition, we must mention the FINE COLLECTION OF ILLUSTRATIONS."—*Dublin Medical Journal*.

"Many of the figures are of great beauty. . . . The chapters on the brain and spinal cord, the ear, and the eye, contain all that is really valuable in the most recent researches."—*Glasgow Medical Journal*.

"The book bears an unmistakable stamp of erudition and labour, and will be VALUED both by teachers and pupils AS A WORK OF REFERENCE."—*British Medical Journal*.

"Dr Macalister's extensive knowledge of comparative anatomy enables him to speak with authority on many interesting but difficult morphological problems. . . . A VERY ABLE and SCIENTIFIC treatise."—*Edinburgh Medical Journal*.

LONDON: EXETER STREET, STRAND.

Professors LANDOIS and STIRLING.

A TEXT-BOOK OF HUMAN PHYSIOLOGY.

WITH SPECIAL REFERENCE TO PRACTICAL MEDICINE.

By DR. L. LANDOIS,

PROFESSOR OF PHYSIOLOGY, UNIVERSITY OF GREIFSWALD.

Translated from the Seventh German Edition, with Annotations and Additions,

By WM. STIRLING, M.D., Sc.D.,

B HACKENBURY PROFESSOR OF PHYSIOLOGY IN OWENS COLLEGE, AND VICTORIA UNIVERSITY, MANCHESTER;
EXAMINER IN THE UNIVERSITIES OF OXFORD, EDINBURGH, AND LONDON; AND FOR THE
FELLOWSHIP OF THE ROYAL COLLEGE OF SURGEONS, ENGLAND.

In Large 8vo, Handsome Cloth.

With Numerous Illustrations. Some in Colours.

FIFTH ENGLISH EDITION.

[In Preparation.]

GENERAL CONTENTS.

PART I.—Physiology of the Blood, Circulation, Respiration, Digestion, Absorption, Animal Heat, Metabolic Phenomena of the Body; Secretion of Urine; Structure of the Skin.

PART II.—Physiology of the Motor Apparatus; the Voice and Speech; General Physiology of the Nerves: Electro-Physiology; the Brain; Organs of Sight, Hearing, Smell, Taste, Touch; Physiology of Development.

* * Since its first appearance in 1880, Prof. LANDOIS' TEXT-BOOK OF PHYSIOLOGY has been translated into three Foreign languages, and passed through SEVEN LARGE EDITIONS.

Opinions of the Press.

"So great are the advantages offered by Prof. LANDOIS' TEXT-BOOK, from the EXHAUSTIVE and EMINENTLY PRACTICAL manner in which the subject is treated, that it has passed through FOUR large editions in the same number of years. . . . Dr. STIRLING'S annotations have materially added to the value of the work. Admirably adapted for the PRACTITIONER. . . . With this Text-book at command, NO STUDENT COULD FAIL IN HIS EXAMINATION."—*The Lancet*.

"One of the MOST PRACTICAL WORKS on Physiology ever written, forming a 'bridge' between Physiology and Practical Medicine. . . . Its chief merits are its completeness and conciseness. . . . The additions by the Editor are able and judicious. . . . EXCELLENTLY CLEAR, ATTRACTIVE, AND SUCCINCT."—*Brit. Med. Journal*.

"The great subjects dealt with are treated in an admirably clear, terse, and happily-illustrated manner. At every turn the doctrines laid down are illuminated by reference to facts of Clinical Medicine or Pathology."—*Practitioner*.

"We have no hesitation in saying that THIS IS THE WORK to which the PRACTITIONER will turn whenever he desires light thrown upon, or information as to how he can best investigate, the phenomena of a COMPLICATED OR IMPORTANT CASE. To the STUDENT it will be EQUALLY VALUABLE."—*Edinburgh Medical Journal*.

"LANDOIS and STIRLING'S work cannot fail to establish itself as one of the most useful and popular works known to English readers."—*Manchester Medical Chronicle*.

"As a work of reference, LANDOIS and STIRLING'S Treatise OUGHT TO TAKE THE FOREMOST PLACE among the text-books in the English language. The woodcuts are noticeable for their number and beauty."—*Glasgow Medical Journal*.

"Unquestionably the most admirable exposition of the relations of Human Physiology to Practical Medicine that has ever been laid before English readers."—*Students' Journal*.

LONDON: EXETER STREET, STRAND.

CROWN 4TO. HANDSOME CLOTH, BEAUTIFULLY ILLUSTRATED, 18s.

With Thirty-six Coloured Plates, comprising 167 Figures.

A T L A S

OF

URINARY SEDIMENTS;

**With Special Reference to their
Clinical Significance.**

EDITED AND ANNOTATED BY

SHERIDAN DELÉPINE, M.B., C.M. (EDIN.),
Professor of Pathology in the Owens College and Victoria University, Manchester.

TRANSLATED BY

FREDERICK CRAVEN MOORE, M.Sc., M.B. (VICT.).

FROM THE GERMAN OF DR. HERMANN RIEDER,
Of the University of Munich.

"This Atlas . . . may be pronounced a success in every way. The Plates . . . are MOST BEAUTIFULLY EXECUTED and reproduced. Professor Delépine's additions to the text are CONSIDERABLE and VALUABLE."—*Lancet*.

"Cannot fail to be of GREAT SERVICE. The figures are ADMIRABLY DRAWN. The work gains much in value from the Editorial Notes of Prof. Delépine."—*Edinburgh Medical Journal*.

"As an Atlas it COULD NOT BE EXCELLED."—*Sheffield Quarterly Medical Journal*.

IN PREPARATION.

T H E

Microbic Diseases of Animals: A PRACTICAL TEXT-BOOK

FOR THE USE OF VETERINARY SURGEONS, PATHOLOGISTS,
STUDENTS, AND OTHERS.

BY

ED. NOCARD,
Professor at the Veterinary School
of Alford.

AND

E. LECLAINCHE,
Professor at the Veterinary School
of Toulouse.

Translated from the French, with Annotations and Additions,

BY

JOHN ROSE-BRADFORD, D.Sc., M.D., F.R.C.P., F.R.S.,
Physician, University College Hospital; Professor-Superintendent of the Brown
Animal Sanatory Institution.

LONDON: EXETER STREET, STRAND.

SECOND EDITION, THOROUGHLY REVISED, ENLARGED, AND IN PART RE-WRITTEN.

In Large 8vo, Handsome Cloth, With Nearly 300 (some Coloured) Illustrations and a Coloured Plate. 21s.

CLINICAL MEDICINE.

A PRACTICAL HANDBOOK FOR PRACTITIONERS AND STUDENTS.

With new Sections on SKIN DISEASES, LARYNGOSCOPIC EXAMINATIONS, &c.,
ROENTGEN RAYS IN SURGERY.

BY JUDSON BURY, M.D., F.R.C.P.,

Physician to the Manchester Royal Infirmary.

Assisted by Several Contributors.

GENERAL CONTENTS.

Introductory.—Symptoms and Physical Signs—Importance of Inspection—Method of Examining a Patient—Case-taking. **Symptoms for the most part Subjective in Character.**—Disturbance of the Functions of the Nervous System—Disturbance of the Functions of the Respiratory and Circulatory Organs—Disturbance of the Functions of the Digestive Organs—Disturbance of the Urinary Organs. **Examination of the Surface of the Body.**—Changes in Size and Shape—Expression of Face—Attitude—Walking—**Examination of the Deeper Structures by means of the Roentgen Rays.** **Temperature.**—Temperature in Health—in Disease. **Examination of the Skin and its Appendages.**—Changes in Colour—Dryness or Moisture—Sensibility—Cutaneous Eruptions:—I. General Diseases with Cutaneous Lesions—Eruptions Produced by Drugs; II. Diseases due to Parasites; III. Local Diseases not due to Parasites—Diseases of the Hair and Hair Follicles—Abnormal Conditions of the Nails. **Examination of the Respiratory System.**—Artificial Divisions of the Chest—Inspection—Palpation—Percussion—Auscultation—The Sputum—The Examination of the Larynx. **Examination of the Circulatory System.**—Anatomical Relations of the Heart—Inspection and Palpation—Percussion—Auscultation—The Pulse. **Examination of the Blood.** **Examination of the Digestive System and of the Abdominal Organs.**—The Tongue—The Teeth—The Gums—The Mucous Membrane of the Mouth—Saliva—The Soft Palate, Fauces and Pharynx—The Oesophagus—The Abdomen—The Stomach—Examination of Vomited Matters—Investigation of the Contents of the Stomach and of its Activity during Digestion—The Intestines—Examination of the Fæces—The Liver and Gall Bladder—The Spleen—The Pancreas—The Omentum—The Mesentery and Retroperitoneal Glands—The Uterus and its Appendages—The Kidneys. **Examination of the Urine.**—Variations in the Quantity of the Urine—In the Colour—Odour—Consistence—Translucency—Specific Gravity and Reaction—Chemical Examination—Sediments and Microscopical Examination:—(a) Unorganised Sediments; (b) Organic Deposits. **Examination of Puncture Fluids.**—Exudations—Transudations—Contents of Cysts. **Examination of the Nervous System.**—Anatomical and Physiological Introduction—Investigation of the Symptoms Produced by Diseases of the Nervous System:—Disorders of Muscular Action—Sensation—Reflex Action—Language—Vision—Hearing—Taste—Smell—INDEX.

"We may say at once that Dr. Judson Bury has SUCCEEDED WELL. His book is planned upon RATIONAL LINES, . . . intended for PRACTICAL SERVICE . . . His work will take a PROMINENT place amongst books of its class, and is one, too, to which the clinical student can TRUST, as being reliable. . . The illustrations are numerous and TELLING."—*The Lancet*.

"This Manual is sure AT ONCE to take a FOREMOST PLACE as a guide in clinical work. . . . Seeks to utilise at the bedside the most recent researches of the Physiologist, the Chemist, and the Bacteriologist. . . . Belongs to the same series of Manuals which has given us the issue of LANDOIS' 'Physiology,' wherein Prof. STIRLING sought to bring the most advanced Physiology into relationship with clinical work; and the very valuable treatise of V. JAKSCH on 'Clinical Diagnosis.'"—*British Medical Journal*.

"This is the latest of the splendid Series of Text-books which Messrs. Charles Griffin & Company have been the means of placing in the hands of the profession. The volume will maintain the reputation of its predecessors, and we HEARTILY CONGRATULATE Dr. Judson Bury on the EXCELLENCE of his book and the STERLING CONTRIBUTION to medical literature which, in its publication, he has made."—*Dublin Medical Journal*.

LONDON: EXETER STREET, STRAND.

By Prof. von JAKSCH.

FOURTH ENGLISH EDITION.

Thoroughly Revised throughout by the Author, Prof. VON JAKSCH, who has made numerous Corrections and Additions specially for this Edition.

In large 8vo, Handsome Cloth. 24s.

CLINICAL DIAGNOSIS:

THE

Bacteriological, Chemical, and Microscopical
Evidence of Disease.

BY PROF. R. v. JAKSCH,

Of the University of Prague.

TRANSLATED FROM THE FOURTH GERMAN EDITION

BY

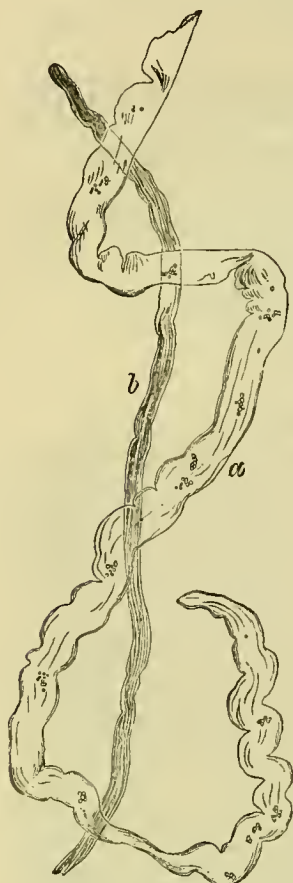
JAMES CAGNEY, M.A., M.D.,

Phys. to the Hosp. for Epilepsy and Paralysis, Regent's Park.

With ADDITIONAL ILLUSTRATIONS, many Coloured.

GENERAL CONTENTS.

The Blood—The Buccal Secretion—The Nasal Secretion—The Sputum—The Gastric Juice and Vomit—The Fæces—Examination of the Urine—Investigation of Exudations, Transudations, and Cystic Fluids—The Secretions of the Genital Organs—Methods of Bacteriological Research—Bibliography.



Cylindroids from the urine in congested kidney.

OPINIONS OF THE PRESS.

"A striking example of the application of the Methods of Science to Medicine. . . STANDS ALMOST ALONE amongst books of this class in the width of its range, the THOROUGHNESS of its exposition, and the clearness of its style. Its value has been recognised in many countries. . . . The translator has done his share of the work in an admirable manner. . . . A standard work . . . as TRUSTWORTHY as it is SCIENTIFIC. . . . The numerous and artistic illustrations form a great feature of the work, and have been admirably reproduced."—*Lancet*.

"Supplies a real want. . . . Rich in information, accurate in detail, lucid in style."—*Brit. Med. Journal*.

"Possesses a HIGH VALUE. . . . There is a most admirable bibliography."—*Edinburgh Med. Review*.

"A new and valuable work . . . worthy of a FIRST PLACE AS A TEXT-BOOK. . . . Of great value both to medical practitioners and medical students."—*Journal of American Med. Association, Chicago*.

LONDON: EXETER STREET, STRAND.

In Large 8vo, Handsome Cloth. 16s.

THE DISEASES OF CHILDHOOD (MEDICAL).

BY

H. BRYAN DONKIN, M.A., M.D., F.R.C.P.,

PHYSICIAN TO THE WESTMINSTER HOSPITAL AND THE EAST LONDON HOSPITAL FOR CHILDREN;
JOINT LECTURER ON MEDICINE AND CLINICAL MEDICINE AT THE
WESTMINSTER HOSPITAL MEDICAL SCHOOL.

OPINIONS OF THE PRESS.

The Lancet.—"DR. DONKIN'S book is in every sense of the word a piece of ORIGINAL WORK, REMARKABLY WELL WRITTEN, and founded on his own LARGE EXPERIENCE."

British Medical Journal.—"DR. DONKIN'S work possesses characters which will earn for it a DISTINCT PLACE in the estimation of the profession. . . . May be confidently recommended to the study of every practitioner who takes an interest in the subjects with which it deals."

Practitioner.—"Unquestionably a VERY VALUABLE contribution to the list of works on the diseases of childhood."

Edinburgh Medical Journal.—"A thoughtful, accurate, and compendious treatise, written in a charming style, and with much vigour."

Medical Magazine.—"A TRULY PRACTICAL work, the record of the personal experience and observation of an independent mind."

IN HANDSOME CLOTH. PRICE ONE GUINEA, NET.

By Sir ANDREW CLARK, Bart., M.D., LL.D., F.R.S.

With Tables and Eight Plates in Colours.

FIBROID DISEASES OF THE LUNG, INCLUDING FIBROID PHTHISIS.

BY

SIR ANDREW CLARK, BART., M.D., LL.D., F.R.S.,

Late Consulting Physician and Lecturer on Clinical Medicine to the London Hospital,

AND

W. J. HADLEY, M.D., AND ARNOLD CHAPLIN, M.D.,

Assistant Physicians to the City of London Hospital for Diseases of the Chest.

"It was due to Sir Andrew Clark that a PERMANENT RECORD of his MOST IMPORTANT PIECE OF PATHOLOGICAL and CLINICAL WORK should be published . . . the subject had been in his mind for many years, and the present volume, COMPLETELY written and twice revised before his lamented death, embodies his LATEST VIEWS upon it. . . . A volume which will be HIGHLY VALUED BY EVERY CLINICAL PHYSICIAN.—*British Medical Journal*."

LONDON: EXETER STREET, STRAND.

By **SIR DYCE DUCKWORTH, M.D., F.R.C.P.**

A TREATISE ON

GOUT.

BY

SIR DYCE DUCKWORTH,

M.D. Edin., LL.D., Hon. Physician to H.R.H. the Prince of Wales, Physician to, and Lecturer on Clinical Medicine in, St. Bartholomew's Hospital.

In Large 8vo. With Chromo-Lithograph, Folding Plate, and Illustrations in the Text. Handsome Cloth, 25s.

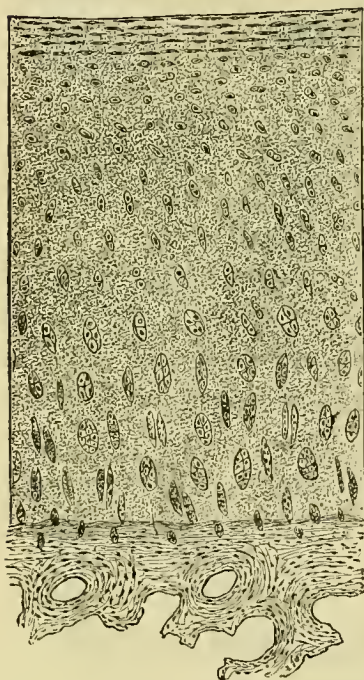


Fig. 1.—Human Articular Cartilage from head of a metatarsal bone (Normal).

*** This work is the result of the special opportunities which London Practice affords as, probably, the largest field of observation for the study of Gout. It is based on the experience derived from both Hospital and Private Practice, each of which furnishes distinctive phases of the disease.

OPINIONS OF THE PRESS.

"All the known facts of Gout are carefully passed in review. . . . We have chapters upon the clinical varieties of Gout, and the affections of special organs and textures. . . . A very VALUABLE STOREHOUSE of material on the nature, varieties, and treatment of Gout."—*Lancet*.

"Impartial in its discussion of theories, full and accurate in its description of clinical facts, and a TRUSTWORTHY GUIDE TO TREATMENT."—*British Medical Journal*.

"Thoroughly practical and highly philosophical. The practitioner will find in its pages an ENORMOUS AMOUNT OF INFORMATION. . . . A monument of clinical observation, of extensive reading, and of close and careful reasoning."—*Practitioner*.

"A very well written, clear, and THOROUGHLY SATISFACTORY EPITOMÉ of our present knowledge upon the subject of Gout."—*Philadelphia Therapeutic Gazette*.

LONDON: EXETER STREET, STRAND.

By A. E. GARROD, M.D., F.R.C.P.

A TREATISE ON
Rheumatism
AND
Rheumatoid Arthritis.

BY

ARCHIBALD E. GARROD,

M.A., M.D. Oxon., F.R.C.P., Assistant-Physician to
the West London Hospital, &c.

In Large 8vo, with Charts and Illustrations. Handsome Cloth, 21s.

* * * The author's aim is to give a consistent picture of Rheumatism as a systemic disease presenting one definite set of phenomena, the result, it is believed, of one single and specific morbid process.



Fig. 1.—Gangliiform Swelling on the Dorsum of the Hand of a Child aged Eight.

OPINIONS OF THE PRESS.

"The wide subject of the etiology of rheumatism is *carefully treated*. . . . The discussion of etiology is completed by a *full analysis* of the conditions which determine individual attacks. . . . Dr. Garrod is to be congratulated on having put before the profession SO CLEAR AND COHERENT an account of the rheumatic diseases. The style of his work is eminently readable."—*Lancet*.

"Well written and reliable. . . . We have little doubt that this monograph *will take rank with the BEST TREATISES* on special medical subjects in the English language."—*Dublin Medical Journal*.

"An EXCELLENT ACCOUNT of the clinical features of the diseases in question. The chapters on treatment are THOROUGHLY PRACTICAL."—*Manchester Medical Chronicle*.

LONDON: EXETER STREET, STRAND.

IMPORTANT NEW WORK. AT PRESS.

In Two Volumes, Large 8vo. Handsome Cloth. With numerous Diagrams and Illustrations.

DISEASES OF THE ORGANS OF RESPIRATION.

AN EPITOME OF THE ETIOLOGY, PATHOLOGY, DIAGNOSIS, AND
TREATMENT OF DISEASES OF THE LUNGS
AND AIR PASSAGES.

BY

SAMUEL WEST, M.D., F.R.C.P.,

Senior Physician to the Royal Free Hospital; Consulting Physician to the New Hospital for Women;
Assistant Physician and Demonstrator of Practical Medicine, St. Bartholemew's
Hospital; Member of the Board of Faculty of Medicine in the
University of Oxford, &c., &c.

In Large 8vo, with Illustrations in the Text and 13 Folding-Plates, 28s.

THE DIAGNOSIS OF DISEASES OF THE HEART AND THORACIC AORTA.

BY

A. ERNEST SANSOM, M.D., F.R.C.P.,

Physician to the London Hospital; Consulting Physician, North-Eastern Hospital for Children;
Examiner in Medicine, Royal College of Physicians (Conjoint Board for England), and
University of Durham; Lecturer on Medical Jurisprudence and Public Health,
London Hospital Medical College, &c.

"Dr. Sansom has opened to us a TREASURE-HOUSE OF KNOWLEDGE. . . . The originality of the work is shown on every page, an originality so complete as to mark it out from every other on the subject with which we are acquainted."—*Practitioner*.

"A book which does credit to British Scientific Medicine. We warmly commend it to all engaged in clinical work."—*The Lancet*.

LONDON: EXETER STREET, STRAND.

READY IMMEDIATELY. *The Nobel Prize Researches
in Physiology, 1901.*

THE WORK OF THE DIGESTIVE GLANDS.

BY PROFESSOR PAWLOW, OF ST. PETERSBURG.

TRANSLATED INTO ENGLISH BY

W. H. THOMPSON, M.D., M.Ch., F.R.C.S.,

*Dunville Professor of Physiology, Queen's College, Belfast; Examiner in Physiology,
R.C.S. Eng. and Royal Univ., Ireland.*

The Publishers (through the Translator) have arranged with the distinguished Author for the publication of the English Edition of these important Lectures, embodying the results of Prof. Pawlow's Researches, which were recently awarded the Nobel Prize of £11,000. This edition will include the later volume, entitled "The Experiments," &c., together with the notes of the most recent researches of Prof. Pawlow, and will constitute the sole authorised edition for England and America of this important Work.

SECOND EDITION. *With Four Chromo-Lithographs, Steel Plate,
and numerous Woodcuts. 25s.*

A TREATISE ON DISEASES OF THE SKIN,

With Special Reference to Diagnosis and Treatment, Including
an Analysis of 12,000 Consecutive Cases.

By T. M'CALL ANDERSON, M.D.,

Professor of Clinical Medicine, University of Glasgow.

OPINIONS OF THE PRESS.

"Professor M'Call Anderson has produced a work likely to prove VERY ACCEPTABLE to the busy practitioner. The sections on treatment are very full. For example, ECZEMA has 110 pages given to it, and 73 of these pages are devoted to treatment."—*Lancet*.

"Beyond doubt, the MOST IMPORTANT WORK on Skin Diseases that has appeared in England for many years. . . . Conspicuous for the AMOUNT AND EXCELLENCE of the CLINICAL AND PRACTICAL information which it contains."—*British Medical Journal*.

"The work may be regarded as a storehouse of FACTS gathered and sifted by one whose opinion is entitled to the highest respect, and we have no hesitation in stating our belief that it has NO EQUAL in this country."—*Edinburgh Medical Journal*.

"ESSENTIALLY a useful book, clear and graphic in description, dogmatic and hopeful on questions of treatment."—*Birmingham Medical Review*.

LONDON: EXETER STREET, STRAND.

By Drs. MEYER and FERGUS.

*With Three Coloured Plates and Numerous Illustrations.
Royal 8vo, Handsome Cloth, 25s.*

A PRACTICAL TREATISE ON DISEASES OF THE EYE.

By EDOUARD MEYER,

*Prof. à l'Ecole Pratique de la Faculté de Médecine de Paris
Chev. of the Leg. of Honour, &c.*

Translated from the Third French Edition, with Additions as
contained in the Fourth German Edition,
By F. FERGUS, M.B., Ophthalmic Surgeon, Glasgow Infirmary.

The particular features that will most commend Dr Meyer's work to English readers are—its CONCISENESS, its HELPFULNESS in explanation, and the PRACTICALITY of its directions. The best proof of its worth may, perhaps, be seen in the fact that it has now gone through *three* French and *four* German editions, and has been translated into most European languages—Italian, Spanish, Russian, and Polish—and even into Japanese.

Opinions of the Press.

"A GOOD TRANSLATION OF A GOOD BOOK. . . . A SOUND GUIDE in the diagnosis and treatment of the various diseases of the eye that are likely to fall under the notice of the general Practitioner. The Paper, Type, and Chromo-Lithographs are all that could be desired. . . . We know of no work in which the DISEASES and DEFORMITIES of the LIDS are more fully treated. Numerous figures illustrate almost every defect remediable by operation."—*Practitioner*.

"A VERY TRUSTWORTHY GUIDE in all respects. . . . THOROUGHLY PRACTICAL. Excellently translated, and very well got up. Type, Woodcuts, and Chromo-Lithographs are alike excellent."—*Lancet*.

"Any Student will find this work of GREAT VALUE. . . . The chapter on Cataract is excellent. . . . The Illustrations describing the various plastic operations are specially helpful."—*Brit. Med. Journal*.

"An EXCELLENT TRANSLATION of a standard French Text-Book. . . . We can cordially recommend Dr Meyer's work. It is essentially a PRACTICAL WORK. The Publishers have done their part in the TASTEFUL and SUBSTANTIAL MANNER CHARACTERISTIC OF THEIR MEDICAL PUBLICATIONS. The Type and the Illustrations are in marked contrast to most medical works."—*Ophthalmic Review*.

LONDON: EXETER STREET, STRAND.

In Large 8vo, with Numerous Illustrations, Handsome Cloth, 10s. 6d.

THE STRUCTURE AND FUNCTIONS OF THE BRAIN AND SPINAL CORD.

BY

VICTOR HORSLEY, B.S., F.R.C.S., F.R.S.,

Professor of Pathology, University College; Assistant-Surgeon, University College Hospital, &c

"The portion treating of the development of the Nervous System from the simplest animals up to man, everywhere replete with interest. . . . In the last four Lectures we have most clearly stated the results of modern work. . . . WELL WORTH the study of all who wish to apply the lessons of recent physiological research."—*Edinburgh Medical Journal*.

"We HEARTILY COMMEND the book to all readers and to ALL CLASSES OF STUDENTS ALIKE, as being almost the only lucid account extant, embodying the LATEST RESEARCHES and their conclusions."—*British Medical Journal*.

*Published Quarterly, Price 6s. Annual Subscription, 20s.; Post Free, 21s.
Subscriptions payable in advance.*

THE JOURNAL OF ANATOMY & PHYSIOLOGY: NORMAL AND PATHOLOGICAL. **HUMAN AND COMPARATIVE.**

CONDUCTED BY

SIR WILLIAM TURNER, M.B., LL.D., D.C.L., F.R.S.,

Professor of Anatomy in the University of Edinburgh;

D. J. CUNNINGHAM, M.D., D.Sc., LL.D., D.C.L., F.R.S.,

Professor of Anatomy and Chirurgery in the University of Dublin;

G. S. HUNTINGDON, A.M., M.D.,

Professor of Anatomy in the Columbia University, New York;

A. MACALISTER, M.A., M.D., LL.D., D.Sc., F.R.S.,

Professor of Anatomy in the University of Cambridge;

AND J. G. M'KENDRICK, M.D., LL.D., F.R.S.,

Professor of the Institutes of Medicine in the University of Glasgow.

* * Messrs. GRIFFIN will be glad to receive at their office Names of Subscribers to the Journal.

LONDON: EXETER STREET, STRAND.

By W. BEVAN LEWIS.

A TEXT-BOOK OF MENTAL DISEASES:

Having Special Reference to the Pathological
Aspects of Insanity.

BY

W. BEVAN LEWIS, L.R.C.P. Lond., M.R.C.S. Eng.,
Medical Director of the West Riding Asylum, Wakefield.

SECOND EDITION. Thoroughly Revised throughout and Enlarged. In Large 8vo,
with Lithographic Plates and Illustrations in the Text. Handsome Cloth. 30s.

OPINIONS OF THE PRESS.

"Will take the HIGHEST RANK as a Text-Book of Mental Diseases."—*British Medical Journal*.

"Without doubt the BEST BOOK in English of its kind. . . . The chapter on Epileptic Insanity and that on the Pathology of Insanity are perfect, and show a power of work and originality of thought which are admirable."—*Journal of Mental Science*.

"The work, all through, is the outcome of original observation and research."—*Mind*.

"A SPLENDID ADDITION to the literature of mental diseases. . . . The anatomical and histological section is ADMIRABLY DONE. . . . The clinical section is concise and tersely written. It is, however, to the pathological section that the work owes its chief merit. As a STANDARD WORK on the pathology of mental diseases this work should occupy a prominent place in the library of every alienist physician."—*Dublin Medical Journal*.

"Affords a fulness of information which it would be difficult to find in any other treatise in the English language."—*Edin. Medical Journal*.

"We record our conviction that the book is the best and most complete treatise upon the pathological aspect of the subject with which we are familiar. . . . An ABSOLUTELY INDISPENSABLE addition to every alienist's and neurologist's library."—*The Alienist and Neurologist*.

"It would be quite impossible to say too much in praise of the ILLUSTRATIONS."—*American Journal of Insanity*.

"The Section on Pathological Anatomy is UNRIVALLED in English literature."—*Bulletin de la Soc. Méd. Mentale de Belgique*.

LONDON: EXETER STREET, STRAND.

THIRD EDITION, THOROUGHLY REVISED AND ENLARGED.

In Large 8vo, Handsome Cloth. 21s.

FORENSIC MEDICINE AND TOXICOLOGY.

For the Use of Practitioners and Students.

BY

J. DIXON MANN, M.D., F.R.C.P.,

Professor of Medical Jurisprudence and Toxicology in Owens College, Manchester; Examiner in Forensic Medicine in the University of London, and in the Victoria University; Physician to the Salford Royal Hospital.

PART I.—Forensic Medicine. PART II.—Insanity in its Medico-legal Bearings. PART III.—Toxicology.

Dublin Medical Journal.—"By far the MOST RELIABLE, MOST SCIENTIFIC, and MOST MODERN book on Medical Jurisprudence with which we are acquainted."

The Law Journal.—"This new work will be of value to all those who as medical men or lawyers are engaged in cases where the testimony of medical experts forms a part of the evidence. . . . A most USEFUL work of reference."

Medical Press.—"This EXCELLENT TEXT-BOOK cannot fail to be a success; it gives all a student requires for examination, and all that is necessary for the practitioner."

Large 8vo, Handsome Cloth. 16s.

LUNATIC ASYLUMS: THEIR ORGANISATION AND MANAGEMENT.

BY CHARLES MERCIER, M.B.,

Late Senior Assistant-Medical Officer at Leavesden Asylum, and at the City of London Asylum.

Part I. Housing.

Part II. Food and Clothing.

Part III. Occupation and Amusement.

Part IV. Detention and Care.

Part V. The Staff.

"Will give a much-needed IMPETUS to the study of Asylum Patients."—*Glasgow Medical Journal*.

"WELL WORTHY of thoughtful study. . . . Contains an immense amount of useful and interesting information."—*Medical Press*.

LONDON: EXETER STREET, STRAND.

SECOND EDITION, REVISED AND ALMOST ENTIRELY RE-WRITTEN.

With all the Original and Many Additional Illustrations. 30s.

THE CENTRAL NERVOUS ORGANS: A GUIDE TO THE STUDY OF THEIR STRUCTURE IN HEALTH AND DISEASE.

BY PROFESSOR H. OBERSTEINER,
University of Vienna.

TRANSLATED, WITH ANNOTATIONS AND ADDITIONS,

BY ALEX HILL, M.A., M.D.,
Master of Downing College.

"Dr. Hill has enriched the work with many notes of his own. . . . Dr. Hill's translation is most accurate, the English is excellent, and the book is very readable. . . . Dr. Obersteiner's work is admirable. He has a marvellous power of marshalling together a large number of facts, all bearing on an extremely intricate subject, into a harmonious, clear, consecutive whole. . . . INVALUABLE as a text-book."—*British Medical Journal*.

"The FULLEST and MOST ACCURATE EXPOSITION now attainable of the results of anatomical inquiry. The Translation is done by one who is himself a Master of Anatomy, able not only to follow his author, but also to supplement him with the results of independent research. Dr. Hill's additions add materially to the value of the original. The work is specially commended to all students of mental science. . . . The illustrative figures are of particular excellence and admirably instructive."—*Mind*.

By Prof. A. C. HADDON.

AN INTRODUCTION TO THE STUDY OF EMBRYOLOGY.

BY ALFRED C. HADDON, M.A., M.R.I.A.,
Professor of Zoology, Royal College of Science, Dublin.

In Large 8vo, with 190 Illustrations Handsome Cloth, 18s.

OPINIONS OF THE PRESS.

"WELL and CLEARLY WRITTEN. . . . Many important discoveries or theories are described, which are necessarily absent from Balfour's work."—*Nature*.

"Dr. Haddon has written the BEST of the three modern English works on the subject."—*Dublin Medical Journal*.

ESSAYS IN HEART AND LUNG DISEASES.

BY ARTHUR FOXWELL, M.A., M.D. CANTAB., F.R.C.P. LOND.,
Physician to the Queen's Hospital, Birmingham.

General Contents.—ON DYSPNŒA—EXPECTORATION IN PHTHISIS—ON CATARRH (A. Acute Pneumonia in Children; B. Acute Laryngitis in Children; C. Acute Primary Peritonitis; D. Catarrhus)—ON CLIMATE (A. the Davos and Engadine Valleys; B. Arosa, a Hamlet, in the Grisons; C. The Climatic Treatment of Tubercular Phthisis)—NON-TUBERCULAR PULMONARY CAVITIES—THE CURABILITY AND PROGNOSIS OF PHTHISIS—THE VASCULAR SYSTEM IN ANÆMIC DEBILITY—ARTERIAL HIGH TENSION—CONGESTION OF THE LUNGS—ON HÆMOPTYSIS—THE ANTISEPTIC TREATMENT OF TUBERCULAR PHTHISIS.

With Diagrams, Demy 8vo, 472 pp. 12s. 6d.

"These ADMIRABLE Essays."—*Brit. Med. Journ.*

LONDON: EXETER STREET, STRAND.

In Large 8vo, Handsome Cloth. With Plates (4 coloured), Illustrations, and 2 Folding Diagrams. 24s. net.

PERNICIOUS ANÆMIA:

ITS PATHOLOGY, INFECTIVE NATURE, SYMPTOMS,
DIAGNOSIS, AND TREATMENT.

INCLUDING INVESTIGATIONS ON

THE PHYSIOLOGY OF HÆMOLYSIS.

By WILLIAM HUNTER, M.D., F.R.C.P., F.R.S.E.,

Assist.-Phys. London Fever Hospital; Arris and Gale Lect. R.C.S. Eng., &c., &c.

CONTENTS.—Part I. Historical. Part II. Morbid Anatomy. Part III. Experimental. Part IV. The Infective Nature of Pernicious Anæmia. Part V. Etiology. Part VI. Symptoms. Part VII. Treatment. Part VIII. The Physiology of Blood Destruction. Part IX. Hæmolysis and Jaundice. INDEX.

"We can speak in the highest terms as to Dr. Hunter's investigations on Hæmolysis, which are some of the most ELABORATE and INSTRUCTIVE yet carried out. . . He has added greatly to what was previously known as to the nature of the disease."—*The Lancet*.

In Large 8vo, Handsome Cloth. 25s.

A TREATISE ON RUPTURES.

BY

JONATHAN F. C. H. MACREADY, F.R.C.S.,

Surgeon to the Great Northern Central Hospital; to the City of London Hospital for Diseases of the Chest, Victoria Park; to the Cheyne Hospital for Sick and Incurable Children; and to the City of London Truss Society.

With Twenty-four Lithographed Plates and Illustrations in the Text.

Lancet.—"A MINE OF WEALTH to those who will study it—a great storehouse of FACTS."

Edinburgh Medical Journal.—"Certainly by far the MOST COMPLETE and AUTHORITATIVE WORK on the subject with which we are acquainted. The text is clear and concise, the numerous illustrations are REPRODUCTIONS FROM PHOTOGRAPHS from nature; the author's statements are founded on an UNIQUE EXPERIENCE, which is freely drawn upon."

Dublin Journal of Medical Science.—"This really is a COMPLETE MONOGRAPH on the subject."

LONDON: EXETER STREET, STRAND.

By W. THORBURN, F.R.C.S. Eng.

A CONTRIBUTION TO THE STUDY OF THE SURGERY OF THE SPINAL CORD.

By WILLIAM THORBURN, B.S., B.Sc., M.D. Lond., F.R.C.S. Eng.,

Assistant Surgeon to the Manchester Royal Infirmary.

In Large 8vo, with Illustrations and Tables. Handsome Cloth, 12s. 6d.

"We congratulate Dr. Thorburn on his MASTERLY MONOGRAPH."—*Saturday Review*.

"A MOST VALUABLE CONTRIBUTION to the literature of a field of surgery which, although but recently brought under cultivation, is already yielding such brilliant results."—*Birmingham Medical Review*.

"Really the FULLEST RECORD we have of Spinal Surgery. . . . The work marks an important advance in modern Surgery."

"A MOST THOROUGH and EXHAUSTIVE work on Spinal Surgery."—*Bristol Medical Journal*.

"A MOST VALUABLE contribution both to Physiology and Surgery."—*Ophthalmic Review*.

"A VERY VALUABLE contribution to practical neurology. . . . This book is an excellent, clear, concise monograph."—*Philadelphia Therapeutic Gazette*.

By H. W. PAGE, F.R.C.S.

RAILWAY INJURIES:

With Special Reference to those of the Back and Nervous System, in their Medico-Legal and Clinical Aspects.

By HERBERT W. PAGE, M.A., M.C. (Cantab), F.R.C.S. (Eng.),

Surgeon to St. Mary's Hospital, Dean, St. Mary's Hospital Medical School, &c.

In Large 8vo. Handsome Cloth, 6s.

"A work INVALUABLE to those who have many railway cases under their care pending litigation. . . . A book which every lawyer as well as doctor should have on his shelves."—*British Medical Journal*.

"Deserves the most careful study. . . . A book which every medical man would do well to read before he presents himself for examination and cross-examination in the witness-box on a railway case."—*Dublin Med. Journal*.

"This book will undoubtedly be of great use to Lawyers."—*Law Times*.

By J. KNOWSLEY THORNTON, M.B., M.C.

THE SURGERY OF THE KIDNEYS,

Being the Harveian Lectures, 1889.

By J. KNOWSLEY THORNTON, M.B., M.C.,

Surgeon to the Samaritan Free Hospital, &c.

In Demy 8vo, with Illustrations. Handsome Cloth, 5s.

"The name and experience of the author confer on the Lectures the stamp of authority."—*British Medical Journal*.

"These Lectures are an exposition by the hand of an EXPERT of what is known and has been done, up to the present, in the Surgery of the Kidneys."—*Edinburgh Medical Journal*.

"The book will necessarily be widely read, and will have an important influence on the progress of this domain of Surgery."—*University Medical Magazine*.

LONDON: EXETER STREET, STRAND.

COMPANION VOLUME TO REID'S SANITATION (See p. 34).

In Crown Svo. Handsome Cloth. Profusely Illustrated. Price 8s. 6d. net.

SANITARY ENGINEERING:

*A PRACTICAL MANUAL OF TOWN DRAINAGE AND SEWAGE AND
REFUSE DISPOSAL.*

**For Sanitary Authorities, Engineers, Inspectors, Architects,
Contractors, and Students.**

BY

FRANCIS WOOD, A.M.INST.C.E., F.G.S.,

Borough Surveyor, Fulham; late Borough Engineer, Bacup, Lancs.

GENERAL CONTENTS.

Introduction.—Hydraulics.—Velocity of Water in Pipes.—Earth Pressures and Retaining Walls.—Powers.—House Drainage.—Land Drainage.—Sewers.—Separate System.—Sewage Pumping.—Sewer Ventilation.—Drainage Areas.—Sewers, Manholes, &c.—Trade Refuse.—Sewage Disposal Works.—BACTERIOLYSIS.—Sludge Disposal.—Construction and Cleansing of Sewers.—Refuse Disposal.—Chimneys and Foundations.

SECOND REVISED AND ENLARGED EDITION. *With Illustrations in the Text, and
Thirty-Seven Plates. Large Svo. Handsome Cloth, 30s.*

SEWAGE DISPOSAL WORKS:

A GUIDE TO THE

*Construction of Works for the Prevention of the Pollution by Sewage
of Rivers and Estuaries.*

BY

W. SANTO CRIMP, MEM. INST. C.E., F.G.S.,

Late Assistant-Engineer to the London County Council.

"All persons interested in Sanitary Science owe a debt of gratitude to Mr. Crimp. . . . His work will be especially useful to SANITARY AUTHORITIES and their advisers . . . EMINENTLY PRACTICAL AND USEFUL . . . gives plans and descriptions of MANY OF THE MOST IMPORTANT SEWAGE WORKS of England . . . with very valuable information as to the COST of construction and working of each. . . . The carefully-prepared drawings permit of an easy comparison between the different systems."—*Lancet*.

"Probably the BEST AND MOST COMPLETE TREATISE on the subject which has appeared in our language. . . . Will prove of the greatest use to all who have the problem of Sewage Disposal to face. . . . The general construction, drawings, and type are all excellent."—*Edinburgh Medical Journal*.

LONDON: EXETER STREET, STRAND.

Griffin's Pocket-Book Series.

By R. S. AITCHISON.

THIRD EDITION, REVISED, ENLARGED, AND BROUGHT THOROUGHLY UP-TO-DATE.
Pocket-Size, Elegantly bound in Leather, Rounded edges, 8s. 6d.

A MEDICAL HANDBOOK

For the use of Practitioners and Students.

BY

R. S. AITCHISON, M.B. (EDIN.), F.R.C.P.E.,

Physician, New Town Dispensary, Edinburgh; Visiting Physician, St. Cuthbert's Hospital,
Edinburgh, &c., &c.

WITH NUMEROUS ILLUSTRATIONS.

General Contents.—Introduction—Diagnosis, Case-Taking, &c.—Diseases of the Circulatory System—Diseases of the Respiratory System—The Urine—Diseases of the Urinary System—Diseases of the Digestive System—Diseases of the Nervous System—Diseases of the Hæmopoietic System—Constitutional and General Diseases—Fevers and Miasmatic Diseases—General Data, Rules, and Tables useful for Reference—*Post-mortem* Examination—Rules for Prescribing—Prescriptions.

"Such a work as this is really NECESSARY for the busy practitioner. The field of medicine is so wide that even the best informed may at the moment miss the salient points in diagnosis . . . he needs to refresh and revise his knowledge, and to focus his mind on those things which are ESSENTIAL. We can speak HIGHLY of Dr. Aitchison's Handbook. . . . HONESTLY EXECUTED. No mere compilation, the scientific spirit and standard maintained throughout put it on a higher plane. . . . EXCELLENTLY got up, handy and portable, and well adapted for READY REFERENCE."—*The Lancet*.

"As a means of ready reference, MOST COMPLETE. The busy practitioner will often turn to its pages."—*Journal of the American Med. Association*.

By MM. CAIRD AND CATHCART.

ELEVENTH EDITION, Revised. Pocket-Size, Elegantly bound in Leather.
With Numerous Illustrations. 8s. 6d.

A SURGICAL HANDBOOK,

For Practitioners, Students, House-Surgeons, and Dressers.

BY

F. M. CAIRD, M.B., F.R.C.S., & C. W. CATHCART, M.B., F.R.C.S.,
Assistant-Surgeons, Royal Infirmary, Edinburgh.

General Contents.—Case-Taking—Treatment of Patients before and after Operation—Anæsthetics: General and Local—Antiseptics and Wound-Treatment—Arrest of Hæmorrhage—Shock and Wound-Fever—Emergency Cases—Tracheotomy: Minor Surgical Operations—Bandaging—Fractures—Dislocations, Sprains, and Bruises—Extemporary Appliances and Civil Ambulance Work—Massage—Surgical Applications of Electricity—Joint-Fixation and Fixed Apparatus—The Urine—The Syphon and its Uses—Trusses and Artificial Limbs—Plaster-Casting—Post-Mortem Examination—Appendix: Various Useful Hints, Suggestions, and Recipes.

"THOROUGHLY PRACTICAL AND TRUSTWORTHY, well up to date, CLEAR, ACCURATE, AND SUCCINCT. The book is bandy, and very well got up."—*Lancet*.

"ADMIRABLY ARRANGED. The best practical little work we have seen. The matter is as good as the manner."—*Edinburgh Medical Journal*.

"Will prove of real service to the Practitioner who wants a useful *vade mecum*."—*British Medical Journal*.

"Fulfills admirably the objects with which it has been written."—*Glasgow Medical Journal*.

"THIS EXCELLENT LITTLE WORK. Clear, concise, and very readable. Gives attention to important details often omitted, but ABSOLUTELY NECESSARY TO SUCCESS."—*Athenæum*.

"A dainty volume."—*Manchester Medical Chronicle*

LONDON: EXETER STREET, STRAND.

Griffin's Pocket-Book Series.

By Drs. PORTER and GODWIN.

FOURTH EDITION, Revised and Enlarged. Leather, Rounded Edges, with
128 Illustrations and Folding-plate. 8s. 6d.

THE SURGEON'S POCKET-BOOK.

Specially adapted to the Public Medical Services.

By MAJOR J. H. PORTER.

REVISED AND IN GREAT PART REWRITTEN

By BRIGADE-SURGEON C. H. Y. GODWIN,

Late Professor of Military Surgery in the Army Medical School.

"Every Medical Officer is recommended to have the 'Surgeon's Pocket-Book,' by Surgeon-Major Porter, accessible to refresh his memory and fortify his judgment."—*Précis of Field-Service Medical Arrangements for Afghan War.*

"The present editor—Brigade-Surgeon Godwin—has introduced so much that is new and practical, that we can recommend this 'Surgeon's Pocket-Book' as an INVALUABLE GUIDE to all engaged, or likely to be engaged, in Field Medical Service."—*Lancet.*

"A complete *vade mecum* to guide the military surgeon in the field."—*British Medical Journal.*

SECOND EDITION. Thoroughly Revised and Partly Re-written, with over 600 Pages.
Pocket Size. Leather. Illustrated. Price 8s. 6d. net

HYGIENE (A Hand-book of).

BY

LT.-COLONEL A. M. DAVIES, D.P.H.Camb.,

Late Assistant-Professor of Hygiene, Army Medical School.

General Contents.—Air and Ventilation—Water and Water Supply—Food and Dieting—Removal and Disposal of Sewage—Habitations—Personal Hygiene—Soils and Sites—Climate and Meteorology—Causation and Prevention of Disease—Disinfection.

"This ADMIRABLE HANDBOOK . . . gives FULL information compressed into the smallest possible bulk."—*Edin. Med. Journal.*

"The elegant dress of the little volume before us is but the outer covering of a TRULY RICH KERNEL, and justly merits the praise it spontaneously calls forth. Attractive to the eye, . . . the volume is equally attractive to the mind. Students will find that its 590 pages comprise all information necessary. COMPACT, HANDY, COMPREHENSIVE, it certainly merits a high place among the text-books of the day."—*Sanitary Record.*

"We are glad to welcome this book . . . The author has had ample opportunity to make himself a MASTER OF THE SCIENCE, and he has a right to speak. . . . WONDERFULLY WELL UP TO DATE, well and clearly written, pleasant to read."—*The Lancet.*

"Really an ADMIRABLE BOOK. . . . A MOST HANDY WORK OF REFERENCE full of information."—*The Hospital.*

"A singularly compact and elegant volume . . . contains an admirable *precis* of everything relating to Hygiene CLEARLY and LOGICALLY ARRANGED and easy of reference. Likely, we think, to be the favourite text-book."—*Public Health.*

LONDON : EXETER STREET, STRAND.

Griffin's Pocket-Book Series.*Leather Limp. With Rounded Edges for the Pocket.**With Illustrations. 10s. 6d.***THE DISEASES OF CHILDREN,
A CLINICAL HANDBOOK.**

By GEO. ELDER, M.D., F.R.C.P.(Ed.), AND

J. S. FOWLER, M.D., F.R.C.P.(Ed.),

Clinical Tutors, Royal Infirmary, Edinburgh; Physicians for Out-patients, Leith.

General Contents.—Anatomy—Physiology—Feeding in Infancy and in Childhood—General Therapeutics—Diagnosis; Method of Examination; Anamnesis—General Examination; Temperature; Examination of the Skin—Alimentary and Hæmopoietic Systems—Circulatory and Respiratory and Urinary Systems—Nervous and Locomotory Systems—Diseases of the Newly-Born—General Constitutional Diseases—Diseases of the Alimentary System—Of the Hæmopoietic System—Of the Circulatory System—Of the Respiratory System—Of the Urinary System—Of the Nervous System, Functional—Of the Nervous System, Organic—Acute Infectious Diseases—INDEX.

"Well adapted to its purpose. For a Student's bed-side guide it may be CORDIALLY RECOMMENDED."—*Edinburgh Medical Journal*.

"The Authors are to be congratulated on the large amount of information which they have compressed into a small space. CONCISE, . . . ACCURATE, . . . CONVENIENT."—*The Practitioner*.

"The book deserves a wide circulation. We recommend it as a THOROUGHLY TRUSTWORTHY GUIDE."—*Scottish Medical and Surgical Journal*.

*Pocket-size, Leather, with Illustrations (some in Colours). 10s. 6d.***OUTLINES OF BACTERIOLOGY,
A PRACTICAL HANDBOOK FOR STUDENTS.**

On the Basis of the PRÉCIS DE MICROBIE
(Ouvrage couronné par la Faculté de Médecine de Paris).

By DR. L. H. THOINOT, AND

E. J. MASSELIN,

Professeur agrégé à la Faculté, Médecin
des Hôpitaux

Médecin Vétérinaire.

Translated and adapted for English Use, with Additions,

By WM. ST. CLAIR SYMMERS, M.B.(ABERD.),

Professor of Pathology and Bacteriology, Govt. Medical School, Cairo; late Assistant Bacteriologist, British Institute of Preventive Medicine, London; Pathologist, Lancashire County Asylum, Prestwick; and Pathologist, General Hospital, Birmingham, &c., &c.

Contents.—I. Glass Apparatus. II. Preparation and Sterilization—Culture Media. III. Autoclave and Incubator. IV. Experiments with Living Animals. V. VI. General Culture Methods. VII. Colouring and Staining. VIII. Microscopic Examination. Part II.—I. Diseases Common to Man and Lower Animals. II. Diseases Special to certain Higher Animals. III. Microbic Diseases Peculiar to Man.

"SINGULARLY FULL and COMPLETE. Compares very favourably in this respect with many manuals of much larger size."—*The Lancet*.

LONDON EXETER STREET, STRAND.

THIRD EDITION. *With Numerous Illustrations.* 5s.

AN INTRODUCTION TO THE STUDY OF

MIDWIFERY.

For the Use of Young Practitioners, Students, and Midwives.

By ARCHIBALD DONALD, M.A., M.D., C.M.EDIN.,

Obstetric Physician to the Manchester Royal Infirmary; Hon. Surgeon to St. Mary's Hospital for Women, Manchester.

British Gynaecological Journal—"HIGHLY CREDITABLE to the author, and should prove of GREAT VALUE to Midwifery Students and Junior Practitioners."

Sheffield Medical Journal—"As an introduction to the study of Midwifery, NO BETTER BOOK could be placed in the hands of the Student."

THIRD EDITION, *Thoroughly Revised.* In Crown 8vo, with Illustrations.
7s. 6d.

OUTLINES OF THE DISEASES OF WOMEN.

A CONCISE HANDBOOK FOR STUDENTS.

By JOHN PHILLIPS, M.A., M.D., F.R.C.P.,

Senior Physician, British Lying-in Hospital; Obstetric Physician and Lecturer on Obstetrics, King's College Hospital; Examiner in Midwifery to the University of Cambridge and to the Royal College of Physicians.

* * Dr. Phillips' work is ESSENTIALLY PRACTICAL in its nature, and will be found invaluable to the student and young practitioner.

"Contains a GREAT DEAL OF INFORMATION in a VERY CONDENSED form. . . . The value of the work is increased by the number of sketch diagrams, some of which are HIGHLY INGENIOUS."—*Edin. Med. Journal*.

"Dr. PHILLIPS' MANUAL is written in a SUCCINCT style. He rightly lays stress on Anatomy. The passages on CASE-TAKING are EXCELLENT. Dr. Phillips is very trustworthy throughout in his views on THERAPEUTICS. He supplies an excellent series of SIMPLE but VALUABLE PRESCRIPTIONS, an INDISPENSABLE REQUIREMENT for students."—*Brit. Med. Journal*.

"This EXCELLENT TEXT-BOOK . . . gives just what the student requires. . . . The prescriptions cannot but be helpful."—*Medical Press*.

In 8vo, with Illustrations. Cloth, 7s. 6d.

The Management of Labour and of the Lying-in Period.

By PROF. H. G. LANDIS, M.D.,

Starling Medical College.

"Fully accomplishes the object kept in view by its author. . . . Will be found of GREAT VALUE by the young practitioner."—*Glasgow Medical Journal*.

LONDON: EXETER STREET, STRAND.

In Large 8vo. Handsome Cloth. With numerous Tables and 22 Illustrations. 16s.

DAIRY CHEMISTRY FOR DAIRY MANAGERS, CHEMISTS, AND ANALYSTS:

***A Practical Handbook for Dairy Chemists
and others having Control of Dairies.***

BY

H. DROOP RICHMOND, F.C.S.,

Chemist to the Aylesbury Dairy Company.

Summary of Contents :—I. Introductory — The Constituents of Milk. II. The Analysis of Milk. III. Normal Milk: Its Adulterations and Alterations, and their Detection. IV. The Chemical Control of the Dairy. V. Biological and Sanitary Matters. VI. Butter. VII. Other Milk Products. VIII. The Milk of Mammals other than the Cow—Appendices—Tables.

"Will probably at once take rank as the LEADING TREATISE on its subject."—*Scotsman*.

Vol. I. now Ready. Complete in Itself. Price 15s.

In Two Volumes, sold Separately.

In Large 8vo. Handsome Cloth. With Numerous Illustrations.

TECHNICAL MYCOLOGY:

***The Utilization of Micro-Organisms in the
Arts and Manufactures.***

**A Practical Handbook on Fermentation and Fermentative Processes
for the Use of Brewers and Distillers, Analysts, Technical and
Agricultural Chemists, and all interested in the
Industries dependent on Fermentation.**

BY DR. FRANZ LAFAR,

Professor of Fermentation-Physiology and Bacteriology in the Technical High School, Vienna.

With an Introduction by DR. EMIL CHR. HANSEN, Principal of the
Carlsberg Laboratory, Copenhagen.

TRANSLATED BY CHARLES T. C. SALTER.

"The chapters teem with interesting matter from beginning to end. We look forward with more than ordinary anticipation to the second volume."—*Lancet*.

"It is difficult to conceive of a more satisfactory practical hand-book being produced."
—*Pharmaceutical Journal*.

"Indispensable . . . comprehensive . . . a perfect mine of wealth."—*The Analyst*.

"An exceedingly interesting and valuable contribution."—*Nature*.

LONDON: EXETER STREET, STRAND.

In Crown Svo. Handsome Cloth. 7s. 6d. net.

FERMENTS AND THEIR ACTIONS.

A TEXT-BOOK OF THE CHEMISTRY AND PHYSICS OF
FERMENTATIVE CHANGES.

BY CARL OPPENHEIMER, PH.D., M.D.,
Of the Physiological Institute at Erlangen.

TRANSLATED FROM THE GERMAN BY
C. AINSWORTH MITCHELL, F.I.C., F.C.S.

Abridged Contents.—I. Introduction.—II. Definition of a Ferment.—III. Chemical Nature of Ferments.—IV. Influence of External Factors.—V. Mode of Action.—VI. Physiological Action of Ferments.—VII. Secretion of Ferments.—VIII. Importance of Ferments to Vital Action.—IX. Proteolytic Ferments.—X. Trypsin.—XI. Bacteriolytic and Hæmolytic Ferments.—XII. Vegetable Ferments.—XIII. Coagulating Ferments.—XIV. Saccharifying Ferments.—XV. Animal Diastases.—XVI. Polysaccharides.—XVII. Enzymes.—XVIII. Ferments which decompose Glucosides.—XIX. Hydrolytic Ferments.—XX. Lactic Acid Fermentation.—XXI. Alcoholic Fermentation.—XXII. Biology of Alcoholic Fermentation.—XXIII. Oxydases.—XXIV. Oxidising Fermentation.—Bibliography.—INDEX.

The present Translation embodies Notes and Additions to the Work made by the Author subsequent to its Publication in Germany.

*In Large Svo. Cloth. With Numerous Illustrations and Blank Pages
for MS. Notes. 12s. 6d.*

THE PHYSIOLOGIST'S NOTE-BOOK.

BY ALEX HILL, M.A., M.D.,
Master of Downing College.

General Contents.—The Blood—The Vascular System—The Nerves—Muscle—Digestion—The Skin—The Kidneys—Respiration—The Senses—Voice and Speech—Central Nervous System—Reproduction—Chemistry of the Body.

CHIEF FEATURES OF DR. HILL'S NOTE-BOOK.

1. It helps the Student to CODIFY HIS KNOWLEDGE.
2. Gives a grasp of BOTH SIDES of an argument.
3. Is INDISPENSABLE for RAPID RECAPITULATION.

The Lancet says of it:—"The work which the Master of Downing College modestly compares to a Note-book is an ADMIRABLE COMPENDIUM of our present information . . . will be a REAL ACQUISITION to Students . . . gives all ESSENTIAL POINTS. . . . The TYPOGRAPHICAL ARRANGEMENT is a chief feature of the book. . . . Secures at a glance the EVIDENCE on both sides of a theory."

The Hospital says:—"The Physiologist's Note-book bears the hall-mark of the Cambridge School, and is the work of one of the most successful of her teachers. . . . Will be INVALUABLE to students."

The British Medical Journal commends in the volume—"Its admirable diagrams, its running bibliography, its clear Tables, and its concise statement of the anatomical aspects of the subject."

LONDON: EXETER STREET, STRAND.

By WILLIAM STIRLING, M.D., Sc.D.,
Professor in the Victoria University, Brackenbury Professor of Physiology and Histology in the
Owens College, Manchester.

FOURTH EDITION. Almost entirely Re-Written and Considerably Enlarged,
with 620 pp. and over 460 Illustrations. 15s. net.

OUTLINES OF PRACTICAL PHYSIOLOGY:

A Manual for the Physiological Laboratory,

INCLUDING

CHEMICAL AND EXPERIMENTAL PHYSIOLOGY, WITH REFERENCE TO PRACTICAL MEDICINE.

Part I.—Chemical Physiology.

Part II.—Experimental Physiology.

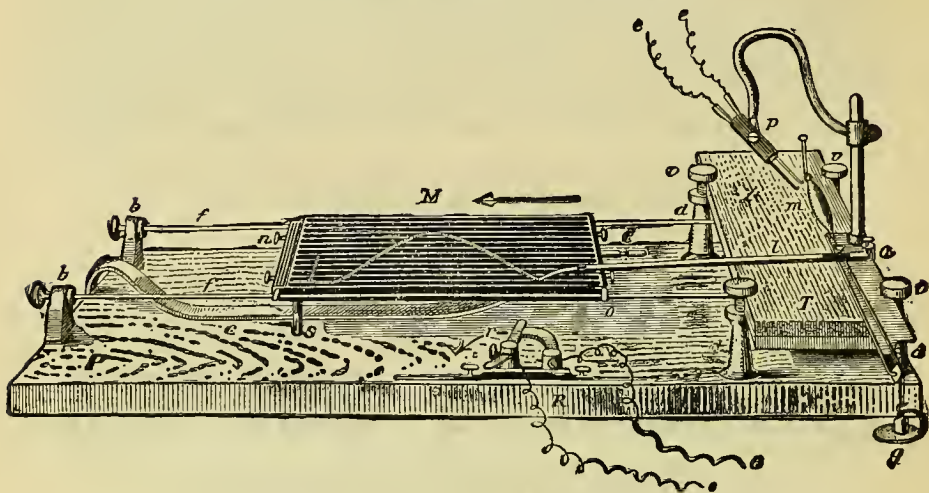


Fig. 118.—Horizontal Myograph of Frédéricq. *M*, Glass plate, moving on the guides *f, f*; *l*, Lever; *m*, Muscle; *p, e, e*, Electrodes; *T*, Cork plate; *a*, Counterpoise to lever; *R*, Key in primary circuit.

OPINIONS OF THE PRESS.

"The BEST STUDENTS' book on the subject, FULL of information, and CAPITALLY illustrated."—*The Lancet*.

"This valuable little manual. . . . The GENERAL CONCEPTION of the book is EXCELLENT; the arrangement of the exercises is all that can be desired; the descriptions of experiments are CLEAR, CONCISE, and to the point."—*British Medical Journal*.

"The student is enabled to perform for himself most of the experiments usually shown in a systematic course of lectures on physiology, and the practice thus obtained must prove INVALUABLE. . . . May be confidently recommended as a guide to the student of physiology, and, we doubt not, will also find its way into the hands of many of our scientific and medical practitioners."—*Glasgow Medical Journal*.

"An exceedingly convenient Handbook of Experimental Physiology."—*Birmingham Medical Review*.

LONDON: EXETER STREET, STRAND.

Companion Volume by Prof. Stirling.

SECOND EDITION. In Extra Crown 8vo, with 368 Illustrations. Cloth, 12s. 6d.

OUTLINES OF PRACTICAL HISTOLOGY:

A MANUAL FOR STUDENTS.

* * Dr. Stirling's "Outlines of Practical Histology" is a compact Handbook for students, providing a COMPLETE LABORATORY COURSE, in which almost every exercise is accompanied by a drawing. Very many of the Illustrations have been prepared expressly for the work.

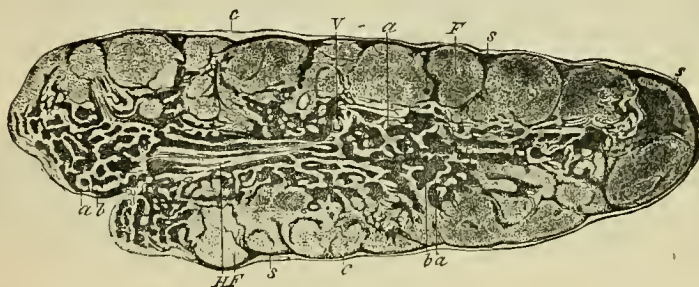


Fig. 200.—L.S., Cervical Ganglion of Dog. *c*, Capsule; *s*, Lymph sinus; *f*, Follicle; *a*, Medullary cord; *b*, Lymph paths of the medulla; *v*, Section of a blood-vessel; *hf*, Fibrous part of the hilum, $\times 10$.

OPINIONS OF THE PRESS.

"The general plan of the work is ADMIRABLE. . . . It is very evident that the suggestions given are the outcome of a PROLONGED EXPERIENCE in teaching Practical Histology, combined with a REMARKABLE JUDGMENT in the selection of METHODS. . . . Merits the highest praise for the ILLUSTRATIONS, which are at once clear and faithful."—*British Medical Journal*.

"We can confidently recommend this small but CONCISELY-WRITTEN and ADMIRABLY ILLUSTRATED work to students. They will find it to be a VERY USEFUL and RELIABLE GUIDE in the laboratory, or in their own room. All the principal METHODS of preparing tissues for section are given, with such precise directions that little or no difficulty can be felt in following them in their most minute details. . . . The volume proceeds from a MASTER in his craft."—*Lancet*.

"We have no doubt the OUTLINES will meet with most favourable acceptance among workers in Histology."—*Glasgow Medical Journal*.

LONDON: EXETER STREET, STRAND.

WORKS

By J. R. AINSWORTH DAVIS, M.A., F.Z.S.,
PROFESSOR OF BIOLOGY, UNIVERSITY COLLEGE, ABERYSTWYTH.

AN ELEMENTARY TEXT-BOOK OF BIOLOGY.

SECOND EDITION. In Two Parts.

PART I. VEGETABLE MORPHOLOGY AND PHYSIOLOGY. With Complete Index-Glossary and 128 Illustrations. Price 8s. 6d.

PART II. ANIMAL MORPHOLOGY AND PHYSIOLOGY. With Complete Index-Glossary and 108 Illustrations. Price 10s. 6d.

EACH PART SOLD SEPARATELY.

* * NOTE.—The SECOND EDITION has been thoroughly Revised and Enlarged, and includes all the leading selected TYPES in the various Organic Groups.

Of the SECOND EDITION, the *British Medical Journal* says:—"Certainly THE BEST 'BIOLOGY' with which we are acquainted, and it owes its pre-eminence to the fact that it is an EXCELLENT attempt to present Biology to the Student as a CORRELATED and COMPLETE SCIENCE. The glossarial Index is a MOST USEFUL addition."

"Furnishes a CLEAR and COMPREHENSIVE exposition of the subject in a SYSTEMATIC form."—*Saturday Review*.

"Literally PACKED with information."—*Glasgow Medical Journal*.

THIRD EDITION, Revised and Enlarged. 3s. 6d.

THE FLOWERING PLANT, AS ILLUSTRATING THE FIRST PRINCIPLES OF BOTANY.

Specially adapted for London Matriculation, S. Kensington, and University Local Examinations in Botany. THIRD EDITION, Revised and Enlarged. With numerous Illustrations.

WITH A SUPPLEMENTARY CHAPTER ON FERNS AND MOSSES.

"It would be hard to find a Text-book which would better guide the student to an accurate knowledge of modern discoveries in Botany. . . . The SCIENTIFIC ACCURACY of statement, and the concise exposition of FIRST PRINCIPLES make it valuable for educational purposes. In the chapter on the Physiology of Flowers, an *admirable résumé* is given, drawn from Darwin, Hermann Müller, Kerner, and Lubbock, of what is known of the Fertilization of Flowers."

* * * Recommended by the National Home-Reading Union ; and also for use in the University Correspondence Classes.

In Small Post 8vo, Interleaved for the use of Students. Limp Covers, 4s.

A ZOOLOGICAL POCKET-BOOK: or, Synopsis of Animal Classification.

Comprising Definitions of the Phyla, Classes, and Orders, with explanatory Remarks and Tables.

By Dr. EMIL SELENKA,
Professor in the University of Erlangen.

Authorised English translation from the Third German Edition.

"Dr. Selenka's Manual will be found useful by all Students of Zoology. It is a COMPREHENSIVE and SUCCESSFUL attempt to present us with a scheme of the natural arrangement of the animal world."—*Edin. Med. Journal*.

"Will prove very serviceable to those who are attending Biology Lectures. . . . The translation is accurate and clear."—*Lancet*.

LONDON : EXETER STREET, STRAND

WORKS by A. WYNTER BLYTH, M.R.C.S., F.C.S.,

Barrister-at-Law, Public Analyst for the County of Devon, and Medical Officer of Health for St. Marylebone.

NEW EDITIONS. Revised and partly Rewritten.

FOODS: THEIR COMPOSITION AND ANALYSIS.

In Demy 8vo, Cloth, with Elaborate Tables and Plates.

FOURTH EDITION. Price 21s.

GENERAL CONTENTS.

History of Adulteration—Legislation, Past and Present—Apparatus useful to the Food-Analyst—"Ash"—Sugar—Confectionery—Honey—Treacle—Jams and Preserved Fruits—Starches—Wheaten-Flour—Bread—Oats—Barley—Rye—Rice—Maize—Millet—Potato—Peas—Chinese Peas—Lentils—Beans—MILK—Cream—Butter—Oleo-margarine—Butterine—Cheese—Lard—Tea—Coffee—Cocoa and Chocolate—Alcohol—Brandy—Rum—Whisky—Gin—Arrack—Liqueurs—Absinthe—Principles of Fermentation—Yeast—Beer—Wine—Vinegar—Lemon and Lime Juice—Mustard—Pepper—Sweet and Bitter Almond—Annatto—Olive Oil—WATER—Standard Solutions and Reagents. *Appendix*: Text of English and American Adulteration Acts.

PRESS NOTICES OF THE FOURTH EDITION.

"Simply INDISPENSABLE in the Analyst's laboratory."—*The Lancet*.

"THE STANDARD WORK on the subject. . . . Every chapter and every page give abundant proof of the strict revision to which the work has been subjected. . . . The section on MILK is, we believe, the most exhaustive study of the subject extant. . . . An INDISPENSABLE MANUAL for Analysts and Medical Officers of Health."—*Public Health*.

"A new edition of Mr. Wynter Blyth's Standard work, ENRICHED WITH ALL THE RECENT DISCOVERIES AND IMPROVEMENTS, will be accepted as a boon."—*Chemical News*.

POISONS: THEIR EFFECTS AND DETECTION.

THIRD EDITION. In Large 8vo, Handsome Cloth.
With Tables and Illustrations. Price 21s.

GENERAL CONTENTS.

I.—Historical Introduction. II.—Classification—Statistics—Connection between Toxic Action and Chemical Composition—Life Tests—General Method of Procedure—The Spectroscope—Examination of Blood and Blood Stains. III.—Poisonous Gases. IV.—Acids and Alkalies. V.—More or less Volatile Poisonous Substances. VI.—Alkaloids and Poisonous Vegetable Principles. VII.—Poisons derived from Living or Dead Animal Substances. VIII.—The Oxalic Acid Group. IX.—Inorganic Poisons—*Appendix*: Treatment, by Antidotes or otherwise, of Cases of Poisoning.

"Undoubtedly the MOST COMPLETE WORK on Toxicology in our language."—*The Analyst* (on the *Third Edition*).

"As a PRACTICAL GUIDE, we know NO BETTER work."—*The Lancet* (on the *Third Edition*).

"One of the best and most comprehensive works on the subject."—*Saturday Review*.

"A sound and Practical Manual of Toxicology, which cannot be too warmly recommended. . . . One of its chief merits is that it discusses substances which have been overlooked."—*Chemical News*.

* * * The THIRD EDITION has been in great part Re-written, Enlarged, and Corrected. New ANALYTICAL METHODS have been introduced, and the CADAVERIC ALKALOIDS, or PTOMAINES, bodies playing so great a part in food poisoning and in the manifestations of disease, have received special attention.

LONDON: EXETER STREET, STRAND.

By W. ELBORNE, F.L.S.

In Extra Crown 8vo, with Litho-plates and Numerous Illustrations. Cloth, 8s. 6d.

ELEMENTS OF PRACTICAL PHARMACY AND DISPENSING.

By WILLIAM ELBORNE, B.A. CANTAB.

Demonstrator of Materia Medica and Teacher of Pharmacy at University College, London; Pharmacist to University College Hospital; Member of the Pharmaceutical Society of Great Britain; Fellow of the Chemical and Linnean Societies of London; formerly Assistant-Lecturer in Pharmacy and Materia Medica at the Owens College, Manchester

"A work which we can very highly recommend to the perusal of all Students of Medicine. . . . ADMIRABLY ADAPTED to their requirements."—*Edinburgh Medical Journal*.

"Mr. Elborne evidently appreciates the Requirements of Medical Students, and there can be no doubt that any one who works through this Course will obtain an excellent insight into Chemical Pharmacy."—*British Medical Journal*.

"The system . . . which Mr. Elborne here sketches is thoroughly sound."—*Chemist and Druggist*.

* * Formerly Published under the Title of "PHARMACY AND MATERIA MEDICA."

By DRS. DUPRÉ AND HAKE.

THIRD EDITION. Revised and brought up-to-date. 9s. net.

A SHORT MANUAL OF INORGANIC CHEMISTRY.

By A. DUPRÉ, Ph.D., F.R.S., AND WILSON HAKE,

Ph.D., F.I.C., F.C.S., of the Westminster Hospital Medical School.

"A well-written, clear, and accurate Elementary Manual of Inorganic Chemistry. . . . We agree heartily in the system adopted by Drs. Dupré and Hake. WILL MAKE EXPERIMENTAL WORK TREBLY INTERESTING BECAUSE INTELLIGIBLE."—*Saturday Review*.

WORKS by Prof. HUMBOLDT SEXTON, F.I.C., F.C.S., F.R.S.E.,

Glasgow and West of Scotland Technical College.

OUTLINES OF QUANTITATIVE ANALYSIS.

With Illustrations. FOURTH EDITION. Crown 8vo, Cloth, 3s.

"A practical work by a practical man . . . will further the attainment of accuracy and method."—*Journal of Education*.

"An ADMIRABLE little volume . . . well fulfils its purpose."—*Schoolmaster*.

"A COMPACT LABORATORY GUIDE for beginners was wanted, and the want has been WELL SUPPLIED. . . . A good and useful book."—*Lancet*.

By THE SAME AUTHOR.

OUTLINES OF QUALITATIVE ANALYSIS.

With Illustrations. THIRD EDITION. Crown 8vo, Cloth, 3s. 6d.

"The work of a thoroughly practical chemist . . . and one which may be unhesitatingly recommended."—*British Medical Journal*.

"Compiled with great care, and will supply a want."—*Journal of Education*.

LONDON: EXETER STREET, STRAND.

TWENTY-SECOND EDITION. *With Numerous Illustrations, 3s. 6d.*

A MANUAL OF NURSING: MEDICAL AND SURGICAL.

By LAURENCE HUMPHRY, M.A., M.D., M.R.C.S.,

Assistant-Physician to and late Lecturer to Probationers at Addenbrooke's Hospital, Cambridge.

GENERAL CONTENTS.—The General Management of the Sick Room in Private Houses—General Plan of the Human Body—Diseases of the Nervous System—Respiratory System—Heart and Blood-Vessels—Digestive System—Skin and Kidneys—Fevers—Diseases of Children—Wounds and Fractures—Management of Child-Bed—Sick-Room Cookery, &c., &c.

"In the fullest sense Dr. Humphry's book is a DISTINCT ADVANCE on all previous Manuals. . . . Its value is greatly enhanced by copious woodcuts and diagrams of the bones and internal organs, by many Illustrations of the art of BANDAGING, by Temperature charts indicative of the course of some of the most characteristic diseases, and by a goodly array of SICK-ROOM APPLIANCES with which EVERY NURSE should endeavour to become acquainted."—*British Medical Journal*.

"We should advise ALL NURSES to possess a copy of the work. We can confidently recommend it as an EXCELLENT GUIDE and companion."—*Hospital*.

THIRD EDITION. *Handsome Cloth, 4s.*

FOODS AND DIETARIES:

HOW AND WHEN TO FEED THE SICK.

By R. W. BURNET, M.D., F.R.C.P.,

Physician in Ordinary to H.R.H. the Prince of Wales; Senior Physician to the Great Northern Central Hospital, &c.

GENERAL CONTENTS.—DIET in Diseases of the Stomach, Intestinal Tract, Liver, Lungs, Heart, Kidneys, &c.; in Diabetes, Scurvy, Anaemia, Scrofula, Gout, Obesity, Rheumatism, Influenza, Alcoholism, Nervous Disorders, Diathetic Diseases, Diseases of Children, with Sections on Prepared and Predigested Foods, and on Invalid Cookery.

"The directions given are UNIFORMLY JUDICIOUS. . . . May be confidently taken as a RELIABLE GUIDE in the art of feeding the sick."—*Brit. Med. Journal*.

"To all who have much to do with Invalids, Dr. Burnet's book will be of great use. . . . The subject is TREATED with ADMIRABLE SENSE and JUDGMENT by Dr. Burnet. The careful study of such books as this will very much help the Practitioner in the Treatment of cases, and powerfully aid the action of remedies."—*Lancet*.

SECOND EDITION. *Handsome Cloth. With Coloured Plates and Numerous Illustrations. Price 6s.*

A MEDICAL AND SURGICAL HELP FOR SHIPMASTERS AND OFFICERS IN THE MERCHANT NAVY.

INCLUDING

FIRST AID TO THE INJURED.

BY

WM. JOHNSON SMITH, F.R.C.S.,

Principal Medical Officer, Seamen's Hospital, Greenwich.

"SOUND, JUDICIOUS, REALLY HELPFUL."—*The Lancet*.

LONDON: EXETER STREET, STRAND.

In Crown 8vo. With Frontispiece. Handsome Cloth. 6s.

THE HYGIENIC PREVENTION OF CONSUMPTION.

BY J. EDWARD SQUIRE, M.D., D.P.H. CAMB.,

Physician to the North London Hospital for Consumption and Diseases of the Chest; Fellow of the Royal Med.-Chirurg. Society, and of the British Institute of Public Health, &c., &c.

GENERAL CONTENTS.—THE NATURE OF CONSUMPTION—PREVENTIVE MEASURES: In Infancy, Childhood, School Life, Adult Life; Exercise, Clothing, Diet; the Household, Choice of Occupation, Residence—STATE HYGIENE—MANAGEMENT OF EARLY CONSUMPTION:—Question of Curability, Climatic Conditions, Travelling, &c.

"We can safely say that Dr. SQUIRE'S work WILL REPAY STUDY even by the most cultivated physician. . . . FULL OF INSTRUCTIVE MATTER."—*The Lancet*.

EIGHTH EDITION. *Thoroughly Revised. With additional Illustrations. Price 6s.*

PRACTICAL SANITATION:

*A HANDBOOK FOR SANITARY INSPECTORS AND OTHERS
INTERESTED IN SANITATION.*

BY GEORGE REID, M.D., D.P.H.,

Fellow of the Sanitary Institute of Great Britain, and Medical Officer, Staffordshire County Council.

WITH AN APPENDIX ON SANITARY LAW

BY HERBERT MANLEY, M.A., M.B., D.P.H.,

Medical Officer of Health for the County Borough of West Bromwich

GENERAL CONTENTS.

Introduction—Water Supply: Drinking Water, Pollution of Water—Ventilation and Warming—Principles of Sewage Removal—Details of Drainage; Refuse Removal and Disposal—Sanitary and Insanitary Work and Appliances—Details of Plumbers' Work—House Construction—Infection and Disinfection—Food, Inspection of; Characteristics of Good Meat; Meat, Milk, Fish, &c., unfit for Human Food—Appendix; Sanitary Law; Model Bye-Laws, &c.

"One of the most EXCELLENT Works on Practical Sanitation we possess. RELIABLE AND ACCURATE."—*Public Health*.

"A VERY USEFUL HANDBOOK, with a very useful Appendix. We recommend it not only to SANITARY INSPECTORS, but to ALL interested in Sanitary matters."—*Sanitary Record*.

LONDON: EXETER STREET, STRAND.

FOURTH EDITION. *Handsome Cloth. With Frontispiece, 4s.*

A MANUAL OF AMBULANCE.

By J. SCOTT RIDDELL, C.M., M.B., M.A.,

ASSISTANT-SURGEON, ABERDEEN ROYAL INFIRMARY; LECTURER AND EXAMINER TO THE ABERDEEN AMBULANCE ASSOCIATION; EXAMINER TO THE ST. ANDREW'S AMBULANCE ASSOCIATION, GLASGOW, AND THE ST. JOHN AMBULANCE ASSOCIATION, LONDON.

With Numerous Illustrations and Full Page Plates.

General Contents.—Outlines of Human Anatomy and Physiology—The Triangular Bandage and its Uses—The Roller Bandage and its Uses—Fractures—Dislocations and Sprains—Hæmorrhage—Wounds—Insensibility and Fits—Asphyxia and Drowning—Suffocation—Poisoning—Burns, Frost-bite, and Sunstroke—Removal of Foreign Bodies from (a) The Eye; (b) The Ear; (c) The Nose; (d) The Throat; (e) The Tissues—Ambulance Transport and Stretcher Drill—The After-treatment of Ambulance Patients—Organisation and Management of Ambulance Classes—Appendix: Examination Papers on First Aid.

"A CAPITAL BOOK. . . . The directions are SHORT and CLEAR, and testify to the hand of an able surgeon."—*Edin. Med. Journal.*

"Should be in the hands of EVERY MOTHER AND NURSE."—*The Nurse* (Boston).

THIRD EDITION. *In Large Crown 8vo. Handsome Cloth. Price 5s.*

THE WIFE AND MOTHER:

A Medical Guide to the Care of Health and the Management of Children.

By ALBERT WESTLAND, M.A., M.D., C.M.

General Contents.—PART I. Early Married Life. PART II. Early Motherhood. PART III. The Child, in Health and Sickness. PART IV. Later Married Life.

"WELL-ARRANGED, and CLEARLY WRITTEN."—*Lancet.*

"Will be USEFUL to a newly-qualified man, commencing general practice."—*British Medical Journal.*

"A REALLY EXCELLENT BOOK. . . . The author has handled the subject conscientiously and with perfect good taste."—*Aberdeen Journal.*

"EXCELLENT AND JUDICIOUS."—*Western Daily Press.*

"The best book I can recommend is 'THE WIFE AND MOTHER,' by Dr. ALBERT WESTLAND, published by Messrs. Charles Griffin & Co. It is a MOST VALUABLE work, written with discretion and refinement."—*Hearth and Home.*

With Illustrations. Crown 8vo extra. Handsome Cloth. 3s.

INFANCY and INFANT-REARING: AN INTRODUCTORY MANUAL.

BY


JOHN BENJ. HELLIER, M.D.LOND., M.R.C.S., ENG.,

LECT. ON DISEASES OF WOMEN AND CHILDREN, YORKSHIRE COLLEGE, LEEDS; EXAMINER IN THE VICTORIA UNIVERSITY, MANCHESTER; SURG. TO THE HOSP. FOR WOMEN AND CHILDREN, LEEDS.

"THOROUGHLY PRACTICAL . . . a MINE of information."—*Public Health.*

LONDON: EXETER STREET, STRAND.

Eighteenth Annual Issue (for 1901).

 For a COMPLETE RECORD of the PAPERS read before the MEDICAL SOCIETIES throughout the United Kingdom during each Year, *vide*

THE OFFICIAL YEAR-BOOK OF THE SCIENTIFIC AND LEARNED SOCIETIES OF GREAT BRITAIN AND IRELAND.

Price 7s. 6d.

COMPILED FROM OFFICIAL SOURCES.

Comprising (together with other Official Information) LISTS of the PAPERS read from January, 1900, to June, 1901, before the ROYAL SOCIETIES of LONDON and EDINBURGH, the ROYAL DUBLIN SOCIETY, the BRITISH ASSOCIATION, and all the LEADING SOCIETIES throughout the Kingdom engaged in the following Departments of Research :—

- | | |
|--|---|
| § 1. Science Generally: <i>i.e.</i> , Societies occupying themselves with several Branches of Science, or with Science and Literature jointly. | § 6. Economic Science and Statistics. |
| § 2. Astronomy, Mathematics and Physics. | § 7. Mechanical Science and Architecture. |
| § 3. Chemistry and Photography. | § 8. Naval and Military Science. |
| § 4. Geology, Geography, and Mineralogy. | § 9. Agriculture and Horticulture. |
| § 5. Biology, including Microscopy and Anthropology. | § 10. Law. |
| | § 11. Literature and History. |
| | § 12. Psychology. |
| | § 13. Archæology. |
| | § 14. MEDICINE. |

"The YEAR-BOOK OF SOCIETIES is a Record which ought to be of the greatest use for the progress of science."—*Lord Playfair, F.R.S., K.C.B., M.P., Past-President of the British Association.*

"It goes almost without saying that a Handbook of this subject will be in time one of the most generally useful works for the library or the desk."—*The Times.*

"The YEAR-BOOK OF SOCIETIES meets an obvious want, and promises to be a valuable work of reference."—*Athenæum.*

"The YEAR-BOOK OF SCIENTIFIC AND LEARNED SOCIETIES meets a want, and is therefore sure of a welcome."—*Westminster Review.*

"AS A BOOK OF REFERENCE, WE HAVE EVER FOUND IT TRUSTWORTHY."—*Lancet.*

"Remarkably full and accurate."—*British Medical Journal.*

"An exceedingly well drawn up volume, compiled with great accuracy, and INDISPENSABLE to any one who may wish to keep himself abreast of the scientific work of the day."—*Edin. Medical Journal.*

Copies of the FIRST ISSUE, giving an account of the History, Organisation, and Conditions of Membership of the various Societies [with Appendix on the Leading Scientific Societies throughout the world], and forming the groundwork of the Series, may still be had, price 7s. 6d. *Also Copies of the succeeding Issues.*

The YEAR-BOOK OF SOCIETIES forms a complete INDEX TO THE SCIENTIFIC WORK of the year in the various Departments. It is used as a ready HANDBOOK in all our great SCIENTIFIC CENTRES, MUSEUMS, and LIBRARIES throughout the Kingdom, and will, without doubt, become an INDISPENSABLE BOOK OF REFERENCE to every one engaged in Scientific Work.

LONDON: CHARLES GRIFFIN & COMPANY, LTD., EXETER STREET, STRAND.

1093~
Cf.

C.

